



# 2010

## Urban Water Management Plan

September 2011



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City of Pismo Beach  
2010 Urban Water Management Plan  
**CONTACT SHEET**

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The Water supplier is a: **Municipality**

The Water supplier is a: **Retailer**

Utility services provided by the water supplier include: **Water, Sewer**

Is This Agency a Bureau of Reclamation Contractor? **No**

Is This Agency a State Water Project Contractor? **No**



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### 2010 URBAN WATER MANAGEMENT PLAN

September 2011



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**City of Pismo Beach**  
**2010 Urban Water Management Plan**

**TABLE OF CONTENTS**

**Page No.**

**CHAPTER 1 - PLAN PREPARATION**

1.1	PURPOSE .....	1-1
1.2	BACKGROUND .....	1-1
	1.2.1 Urban Water Management Planning Act .....	1-1
	1.2.2 Previous Urban Water Management Plans .....	1-2
1.3	COORDINATION .....	1-3
	1.3.1 Data Sources and Previous Reports .....	1-5
1.4	PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION .....	1-6
	1.4.1 Plan Adoption .....	1-6
	1.4.2 Plan Submittal .....	1-6
	1.4.3 Plan Implementation .....	1-7
1.5	REPORT ORGANIZATION .....	1-7
1.6	CLIMATE CHANGE .....	1-7
1.7	ABBREVIATIONS .....	1-8
1.8	ACKNOWLEDGEMENTS .....	1-8

**CHAPTER 2 - SYSTEM DESCRIPTION**

2.1	SERVICE AREA PHYSICAL DESCRIPTION .....	2-1
	2.1.1 Planning Areas .....	2-3
	2.1.2 Government .....	2-3
	2.1.3 Service Area Climate .....	2-6
2.2	SERVICE AREA POPULATION .....	2-7
2.3	EXPANSION PROJECTS .....	2-10
	2.3.1 Price Canyon .....	2-11
	2.3.2 Los Robles Del Mar .....	2-12

**CHAPTER 3 - SYSTEM DEMANDS**

3.1	BASELINES AND TARGETS .....	3-1
	3.1.1 Baseline Water Use .....	3-1
	3.1.2 Target Water Use .....	3-4
	3.1.3 Summary of Baseline and Target Water Use .....	3-9
3.2	WATER DEMANDS .....	3-10
	3.2.1 Historical Water Use .....	3-11
	3.2.2 Per Capita Consumption .....	3-11
	3.2.3 Water Demand Projections .....	3-15
	3.2.4 Wholesale Water Demand Projections .....	3-20
	3.2.5 Lower Income Water Demand Projections .....	3-21
3.3	WATER USE REDUCTION PLAN .....	3-22
	3.3.1 Water Conservation Measures .....	3-22
	3.3.2 Recycled Water .....	3-24
	3.3.3 Economic Impacts .....	3-24

## **CHAPTER 4 - SYSTEM SUPPLIES**

4.1	WATER SUPPLY SOURCES.....	4-1
4.1.1	Water Supply Facilities .....	4-2
4.1.2	Distribution System and Storage .....	4-2
4.1.3	Current and Projected Water Sources .....	4-3
4.1.4	Wholesale Supplies .....	4-6
4.2	GROUNDWATER BASIN .....	4-7
4.2.1	Groundwater Basin Description .....	4-7
4.2.2	Groundwater Management Plan .....	4-8
4.2.3	Groundwater Levels and Historical Trends .....	4-9
4.2.4	Groundwater Overdraft .....	4-10
4.3	EXISTING AND PROJECTED GROUNDWATER PUMPING .....	4-11
4.4	TRANSFER AND EXCHANGE OPPORTUNITIES.....	4-12
4.5	DESALINATED WATER OPPORTUNITIES.....	4-13
4.6	RECYCLED WATER OPPORTUNITIES .....	4-13
4.6.1	Wastewater Treatment Facilities .....	4-14
4.6.2	Water Recycling Facilities.....	4-15
4.6.3	Wastewater Generation .....	4-16
4.6.4	Current Recycled Water Use .....	4-17
4.6.5	Projected Recycled Water Use.....	4-19
4.6.6	Limitations for Recycled Water Use .....	4-21
4.6.7	Encouraging Recycled Water Use.....	4-22
4.6.8	Recycled Water Use Optimization Plan.....	4-23
4.7	FUTURE WATER PROJECTS.....	4-23
4.7.1	Surface Water .....	4-24
4.7.2	Recycled Water.....	4-24
4.7.3	Groundwater Recharge and Recovery .....	4-25

## **CHAPTER 5 - WATER SUPPLY RELIABILITY AND WATER SHORTAGE CONTINGENCY PLANNING**

5.1	WATER SUPPLY RELIABILITY .....	5-1
5.1.1	Resource Maximization/Import Minimization .....	5-1
5.1.2	Factors Affecting Supply Reliability .....	5-2
5.2	WATER SHORTAGE CONTINGENCY PLANNING .....	5-5
5.2.1	Stages of Action and Reduction Objectives .....	5-7
5.2.2	Actions during a Catastrophic Interruption .....	5-10
5.2.3	Mandatory Prohibitions on Water Wasting .....	5-11
5.2.4	Consumption Reduction Methods in Most Restrictive Stage .....	5-11
5.2.5	Excessive Use Penalties.....	5-12
5.2.6	Revenue and Expenditure Impacts/Measures to Overcome Impacts.....	5-12
5.2.7	Water Conservation Ordinance .....	5-13
5.2.8	Reduction Measuring Mechanism .....	5-13
5.3	WATER QUALITY .....	5-13
5.3.1	Source Management.....	5-14
5.3.2	Seawater Intrusion .....	5-14
5.3.3	Water Quality Impacts Summary .....	5-15
5.4	DROUGHT PLANNING .....	5-16
5.4.1	Basis of Water Year Data .....	5-17
5.4.2	Supply Reliability - Historic and Current Conditions .....	5-17
5.4.3	Projected Normal Year Supply/Demand .....	5-21
5.4.4	Projected Single Dry Year Supply/Demand.....	5-21

5.4.5	Projected Multiple Dry Year Supply/Demand .....	5-22
-------	---	------

## **CHAPTER 6 - DEMAND MANAGEMENT MEASURES**

6.1	DMM 1 - WATER SURVEY PROGRAMS FOR SINGLE-FAMILY RESIDENTIAL AND MULTI-FAMILY RESIDENTIAL CUSTOMERS .....	6-2
6.2	DMM 2 - RESIDENTIAL PLUMBING RETROFIT .....	6-2
6.3	DMM 3 - SYSTEM WATER AUDITS, LEAK DETECTION, AND REPAIR .....	6-4
6.4	DMM 4 - METERING WITH COMMODITY RATES FOR ALL NEW CONNECTIONS AND RETROFIT OF EXISTING CONNECTIONS .....	6-4
6.5	DMM 5 - LARGE LANDSCAPE CONSERVATION PROGRAMS AND INCENTIVES .....	6-4
6.6	DMM 6 - HIGH-EFFICIENCY WASHING MACHINE REBATE PROGRAM .....	6-5
6.7	DMM 7 - PUBLIC INFORMATION PROGRAMS .....	6-5
6.8	DMM 8 - SCHOOL EDUCATION PROGRAM .....	6-5
6.9	DMM 9 - CONSERVATION PROGRAMS FOR COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL ACCOUNTS .....	6-5
6.10	DMM 10 - WHOLESALE AGENCY PROGRAMS .....	6-5
6.11	DMM 11 - CONSERVATION PRICING .....	6-5
6.12	DMM 12 - WATER CONSERVATION COORDINATOR .....	6-6
6.13	DMM 13 - WATER WASTE PROHIBITION .....	6-6
6.14	DMM 14 - RESIDENTIAL ULTRA LOW FLUSH TOILET REPLACEMENT PROGRAMS .....	6-6

## **CHAPTER 7 - COMPLETED UWMP CHECKLIST**

7.1	UWMP CHECKLIST .....	7-1
-----	----------------------	-----

Appendix A	Outreach Documents and Coordination with Relevant Agencies
Appendix B	Notice of Public Review of 2010 Urban Water Management Plan
Appendix C	Resolution to Adopt the 2010 Urban Water Management Plan
Appendix D	Verification of Plan Submittal
Appendix E	Community Development Department Memorandum (April 2001)
Appendix F	Price Canyon Project Vicinity Map
Appendix G	Pismo Beach Council Agenda Report (October 2009)
Appendix H	Northern Cities Management Area, Selected Figures from 2010 Annual Monitoring Report
Appendix I	Historical Groundwater Elevation Data
Appendix J	Gentlemen's Agreement
Appendix K	Santa Maria River Valley Groundwater Basin Adjudication Judgment
Appendix L	Water Shortage Contingency Plan
Appendix M	Water Conservation Ordinance
Appendix N	Water Quality Report (2009)
Appendix O	Lopez Water Treatment Plant Process Flow Map
Appendix P	San Luis Obispo County Correspondence on State Water Project Delivery Projections
Appendix Q	CUWCC BMP Annual Reports
Appendix R	Water and Sewer Rate Structure (2010-2011)

## **LIST OF TABLES**

Table 1.1	Coordination with Appropriate Agencies (Guidebook Table 1) .....	1-4
Table 2.1	Climate .....	2-6
Table 2.2	Population - Current and Projected (Guidebook Table 2) .....	2-9
Table 3.1	Base Daily Per Capita Water Use: 10 to 15-Year Range (Guidebook Table 13) .....	3-2
Table 3.2	Base Daily Per Capita Water Use: 10-Year Range (Guidebook Table 14) .....	3-3
Table 3.3	Base Daily Per Capita Water Use: 5-Year Range (Guidebook Table 15) .....	3-3
Table 3.4	Method 4 Target Determination Summary .....	3-9
Table 3.5	Baseline and Target Water Use Summary .....	3-10
Table 3.6	Historic Monthly Water Production (1995 - 2010) .....	3-12
Table 3.7	Water Deliveries – Actual, 2005 (Guidebook Table 3) .....	3-13
Table 3.8	Water Deliveries – Actual, 2010 (Guidebook Table 4) .....	3-13
Table 3.9	Conservation Demand Comparison .....	3-15
Table 3.10	Water Deliveries – Projected, 2015 (Guidebook Table 5) .....	3-17
Table 3.11	Water Deliveries – Projected, 2020 (Guidebook Table 6) .....	3-17
Table 3.12	Water Deliveries – Projected 2025, 2030, 2035 (Guidebook Table 7) .....	3-18
Table 3.13	Sales to Other Water Agencies (Guidebook Table 9) .....	3-18
Table 3.14	Additional Water Uses and Losses (Guidebook Table 10) .....	3-19
Table 3.15	Total Water Use (Guidebook Table 11) .....	3-20
Table 3.16	Retail Agency Demand Projections Provided to Wholesale Suppliers (Guidebook Table 12) .....	3-21
Table 3.17	Low Income Projected Water Demands (Guidebook Table 8) .....	3-21
Table 4.1	Existing Groundwater Wells .....	4-2
Table 4.2	Distribution Zone Summary .....	4-3
Table 4.3	Water Supplies - Current and Projected (Guidebook Table 16) .....	4-6
Table 4.4	Wholesale Supplies – Existing and Planned Sources of Water (Guidebook Table 17) .....	4-7
Table 4.5	Historic Groundwater Pumping (Guidebook Table 18) .....	4-12
Table 4.6	Projected Groundwater Pumping (Guidebook Table 19) .....	4-12
Table 4.7	Transfer and Exchange Opportunities (Guidebook Table 20) .....	4-13
Table 4.8	Price Canyon Potential Recycled Water Uses .....	4-16
Table 4.9	Recycled Water – Wastewater Collection and Treatment (Guidebook Table 21) .....	4-17
Table 4.10	Recycled Water – Non-Recycled Wastewater Disposal (Guidebook Table 22) .....	4-18
Table 4.11	2010 Recycled Water Use Compared to 2005 UWMP Use Projections (Guidebook Table 24) .....	4-18
Table 4.12	Recycled Water – Potential Future Use (Guidebook Table 23) .....	4-20
Table 4.13	Methods to Encourage Recycled Water Use (Guidebook Table 25) .....	4-22
Table 4.14	Future Water Supply Projects (Guidebook Table 26) .....	4-26
Table 5.1	Factors Resulting in Inconsistency of Supply (Guidebook Table 29) .....	5-3
Table 5.2	Water Shortage Contingency - Rationing Stages (Guidebook Table 35) .....	5-7
Table 5.3	Water Shortage Contingency - Mandatory Prohibitions (Guidebook Table 36) .....	5-11
Table 5.4	Water Shortage Contingency - Consumption Reduction Methods (Guidebook Table 37) .....	5-12
Table 5.5	Water Shortage Contingency - Penalties and Charges (Guidebook Table 38) .....	5-13
Table 5.6	Water Quality - Current and Projected Water Supply Impacts	

	(Guidebook Table 30) .....	5-16
Table 5.7	Basis of Water Year Data (Guidebook Table 27) .....	5-17
Table 5.8	Supply Reliability - Historical Conditions (Guidebook Table 28) .....	5-20
Table 5.9	Supply Reliability - Current Water Sources (Guidebook Table 31) .....	5-20
Table 5.10	Supply and Demand Comparison - Normal Year (Guidebook Table 32) ...	5-21
Table 5.11	Supply and Demand Comparison - Single Dry Year (Guidebook Table 33) .....	5-22
Table 5.12	Supply and Demand Comparison - Multiple Dry Year Events (Guidebook Table 34) .....	5-23
Table 6.1	Demand Management Measures .....	6-3
Table 7.1	Completed UWMP Checklist, Organized by Topic .....	7-2

## **LIST OF FIGURES**

Figure 2.1	City of Pismo Beach .....	2-2
Figure 2.2	Sphere of Influence .....	2-4
Figure 2.3	Extended Planning Area .....	2-5
Figure 2.4	Climograph .....	2-7
Figure 2.5	Census Population Age .....	2-8
Figure 2.6	Historical and Projected Population .....	2-10
Figure 3.1	Historical Water Use and Baselines .....	3-4
Figure 3.2	Method 3 Target Per Capita Water Use .....	3-6
Figure 3.3	Method 4 Target Water Use Calculation Procedure .....	3-8
Figure 3.4	2010 Water Use by Customer Type .....	3-14
Figure 3.5	Projected Per Capita Water Use .....	3-14
Figure 3.6	Projected Water Demand .....	3-16

## **LIST OF ABBREVIATIONS**

<b><u>Abbreviation</u></b>	<b><u>Definition</u></b>
°F	Degrees Fahrenheit
AB	State Assembly Bill
Act	Urban Water Management Planning Act
AF	acre-feet
AFY	acre-feet per year
Basin	Santa Maria River Valley Groundwater Basin
BMP	Best Management Practice
Bulletin 118	California's Groundwater: Bulletin 118, prepared by the Department of Water Resources
CCR	California Code of Regulations
CCWA	Central Coast Water Authority
CFS	cubic feet per second

<b><u>Abbreviation</u></b>	<b><u>Definition</u></b>
CII	Commercial, Industrial, Institutional
CIMIS	California Irrigation Management Information System
City	City of Pismo Beach
Coastal Act	California Coastal Act
County	San Luis Obispo County
CUWCC	California Urban Water Conservation Council
DMM	Demand Management Measure
DOF	California Department of Finance
DPH	California Department of Public Health
Draft EIR	Draft Environmental Impact Report
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
ETo	Evapotranspiration
gpcd	gallons per capita per day
GPD	gallons per day
GPM	gallons per minute
GRRP	Groundwater Recharge and Recovery Program
Guidebook	DWR Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan
GWR	Groundwater Rule
GW Supply Assessment	Groundwater Supply Assessment for the Price Canyon Planning Area Constraint Study
HCP	Habitat Conservation Plan
LAFCo	Local Agency Formation Commission
LRDM	Los Robles del Mar
MCL	Maximum Contaminant Level
MG	million gallons
MGD	million gallons per day
MHI	Medium Household Income
MOU	Memorandum of Understanding
MSL	Mean Sea Level

<b><u>Abbreviation</u></b>	<b><u>Definition</u></b>
Plan	Urban Water Management Plan
Planning Area	Price Canyon Planning Area
PXP	Plains Exploration and Production
Reuse Program	City of Pismo Beach Reclaimed Wastewater Reuse Program
RWQCB	Regional Water Quality Control Board
SBx7-7	Water Conservation Act of 2009
SLOFCWCD	San Luis Obispo County Flood Control and Water Conservation District (Zone 3)
SOI	Sphere of Influence
Specific Plan	Price Canyon Planning Area "R" Specific Plan
SWP	State Water Project
ULFT	Ultra Low Flush Toilet
UWMP	Urban Water Management Plan
UWMPA	Urban Water Management Planning Act
WTP	Water Treatment Plant
WWTP	Waste Water Treatment Plant

#### **DWR TABLE INDEX**

<b><u>DWR Table</u></b>	<b><u>DWR Name</u></b>	<b><u>Report Table No.</u></b>
1	Coordination with Appropriate Agencies	1.1
2	Population - Current and Projected	2.2
3	Water Deliveries - Actual, 2005	3.7
4	Water Deliveries - Actual, 2010	3.8
5	Water Deliveries - Projected, 2015	3.10
6	Water Deliveries - Projected, 2020	3.11
7	Water Deliveries - Projected 2025, 2030, and 2035	3.12
8	Low-Income Projected Water Demands	3.17
9	Sales to Other Water Agencies	3.13
10	Additional Water Uses and Losses	3.14
11	Total Water Use	3.15
12	Retail Agency Demand Projections Provided to Wholesale Suppliers	3.16
13	Base Period Ranges	3.1
14	Base Daily per Capita Water Use, 10- to 15-Year	3.2

<b><u>DWR Table</u></b>	<b><u>DWR Name</u></b>	<b><u>Report Table No.</u></b>
	Range	
15	Base Daily per Capita Water Use, 5-Year Range	3.3
16	Water Supplies - Current and Projected	4.3
17	Wholesale Supplies - Existing and Planned Sources of Water	4.4
18	Groundwater - Volume Pumped	4.5
19	Groundwater - Volume Projected to be Pumped	4.6
20	Transfer and Exchange Opportunities	4.7
21	Recycled Water - Wastewater Collection and Treatment	4.9
22	Recycled Water - Non-Recycled Wastewater Disposal	4.10
23	Recycled Water - Potential Future Use	4.12
24	Recycled Water - 2005 UWMP Use Projection Compared to 2010 Actual	4.11
25	Methods to Encourage Recycled Water Use	4.13
26	Future Water Supply Projects	4.14
27	Basis of Water Year Data	5.7
28	Supply Reliability - Historic Conditions	5.8
29	Factors Resulting in Inconsistency of Supply	5.1
30	Water Quality - Current and Projected Water Supply Impacts	5.6
31	Supply Reliability - Current Water Sources	5.9
32	Supply and Demand Comparison - Normal Year	5.10
33	Supply and Demand Comparison - Single Dry Year	5.11
34	Supply and Demand Comparison - Multiple Dry Year Events	5.12
35	Water Shortage Contingency - Rationing Stages to Address Water Supply Shortages	5.2
36	Water Shortage Contingency - Mandatory Prohibitions	5.3
37	Water Shortage Contingency - Consumption Reduction Methods	5.4
38	Water Shortage Contingency - Penalties and Charges	5.5

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**PLAN PREPARATION****1.1 PURPOSE**

The California Water Code requires urban water suppliers within the state to prepare and adopt Urban Water Management Plans (UWMPs) for submission to the California Department of Water Resources (DWR). The UWMPs, which are required to be filed every five years, must satisfy the requirements of the Urban Water Management Planning Act (UWMPA) of 1983 including amendments that have been made to the Act and other applicable regulations. The UWMPA requires urban water suppliers servicing 3,000 or more connections, or supplying more than 3,000 acre-feet (AF) of water annually, to prepare an UWMP.

The purpose of the UWMP is for water suppliers to evaluate their long-term resource planning and establish management measures to ensure adequate water supplies are available to meet existing and future demands. The UWMP provides a framework to help water suppliers maintain efficient use of urban water supplies, continue to promote conservation programs and policies, ensure that sufficient water supplies are available for future beneficial use, and provide a mechanism for response during water drought conditions. This report, which was prepared in compliance with the California Water Code, and as set forth in the 2010 guidelines and format established by the DWR, constitutes the City of Pismo Beach (City) 2010 UWMP.

The City did not participate in an area, regional, watershed, or basin-wide UWMP.

**1.2 BACKGROUND****1.2.1 Urban Water Management Planning Act**

In 1983, State Assembly Bill (AB) 797 modified the California Water Code Division 6 by creating the UWMPA. Several amendments to the original UWMPA, which were also introduced in 1983, increased the data requirements and planning elements to be included in the 2005 and 2010 UWMPs.

Initial amendments to the UWMPA required that total projected water use be compared to water supply sources over the next 20 years, in 5-year increments. Recent DWR guidelines recommend projecting through a 25-year planning horizon to maintain a 20-year timeframe until the next UWMP update has been completed.

Other amendments require that UWMPs include provisions for recycled water use, demand management measures, and a water shortage contingency plan. The UWMPA requires inclusion of water supply reliability and water shortage contingency planning, which meets the specifications set forth therein. Analysis of recycled water use was

added in the reporting requirements and figures prominently in the evaluation of future and alternative water supplies. Each water supplier must describe their water demand management measures that are being implemented or that are scheduled for implementation. Each urban water purveyor must coordinate the preparation of the water shortage contingency plan with other urban water purveyors in the area, to the extent practicable.

In addition to the UWMPA and its amendments, there are several other regulations that are related to the content of the UWMP. In summary, the relevant regulations are:

- **AB 1420:** Requires implementation of demand management measures (DMMs)/best management practices (BMPs) and meeting the 20 x 2020 targets to qualify for water management grants or loans.
- **AB 1465:** Requires water suppliers to describe opportunities related to recycled water use and stormwater recapture to offset potable water use.
- **Amendments Senate Bill (SB) 610 (Costa, 2001), and AB 901 (Daucher, 2001):** Effective beginning January 1, 2002, require counties and cities to consider information relating to the availability of water to supply new large developments by mandating the preparation of further water supply planning (Daucher) and Water Supply Assessments (Costa).
- **SB 1087:** Requires water suppliers to report single-family residential (SFR) and multi-family residential (MFR) projected water use for lower income areas separately.
- **Amendment SB 318 (Alpert, 2004):** Requires the UWMP to describe the opportunities for development of desalinated water, including but not limited to, ocean water, brackish water, and groundwater, as long-term supply.
- **AB 105 (Wiggins, 2004):** Requires urban water suppliers to submit their UWMPs to the California State Library.
- **SBx7-7:** Requires development and use of new methodologies for reporting population growth estimates, base per capita use, and water conservation. This water bill also extended the 2010 UWMP submittal deadline for retail agencies to July 1, 2011. As of the date of this report, DWR is still finalizing two of the four new methodologies that an agency can choose from to establish their intermediate (2015) and year 2020 water conservation targets.
- **SB 1478:** This bill extends the 2010 UWMP deadline for wholesale agencies to July 1, 2011, as SBx7-7 did for retail agencies.

## **1.2.2 Previous Urban Water Management Plans**

Pursuant to the UWMPA, the City previously prepared an UWMP in 2005, which was approved and adopted on November 21, 2006. Following adoption, the 2005 UWMP was

submitted to and considered complete by DWR. The City also prepared an UWMP in 2002, fulfilling the 2000 UWMP requirements. This 2010 UWMP report serves as an update to the 2005 UWMP and draws from that document.

### 1.3 COORDINATION

The UWMPA requires that the UWMP identify the agencies with which the City coordinated in the planning, discussion, and preparation of the UWMP. In addition, documentation is required to provide assurance that appropriate public notification deadlines and submission requirements are met.

#### Law

*10620 (d) (2). Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.*

*10621 (b). Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days prior to the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.*

*10635 (b). The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.*

*10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.*

*10642. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area.*

While preparing the 2010 UWMP, the City coordinated its efforts with relevant agencies to ensure that the data and issues are presented accurately. Table 1.1 summarizes the external outreach conducted during UWMP preparation. Appendix A contains copies of outreach documents.

<b>Table 1.1 Coordination with Appropriate Agencies (Guidebook Table 1)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>							
<b>Coordinating Agencies</b>	<b>Participated in Developing the Plan</b>	<b>Commented on the Draft</b>	<b>Attended Public Meetings</b>	<b>Was Contacted for Assistance</b>	<b>Was Sent a Copy of the Draft Plan</b>	<b>Was Sent a Notice of Intention to Adopt</b>	<b>Not Involved/ No Information</b>
DWR				X			
City of Pismo Beach	X	X	X	X	X		
General Public		X	X		X	X	
County of San Luis Obispo					X	X	
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.							

The City also provided formal written notification to San Luis Obispo County that the City's UWMP was being updated for 2010. In accordance with the UWMPA, this notification was provided to San Luis Obispo County at least 60 days prior to the public hearing of the plan. Copies of the final UWMP will be provided to San Luis Obispo County no later than 30 days after its submission to DWR.

The City is committed to encouraging the active involvement of diverse social, cultural, and economic elements of its citizenry. On September 3, 2011 and September 10, 2011, the City placed a notice in the local newspaper stating that its UWMP was being updated and that a public hearing would be conducted to address comments and concerns from members of the community. A copy of this notification is included in Appendix B. The Draft 2010 UWMP was made available for public inspection at the City of Pismo Beach Council Chamber, located at 760 Mattie Road, Pismo Beach, CA 93449. In addition, the City also posted a copy of the public review draft UWMP on its website.<sup>1</sup>

The City also held a public hearing on September 20, 2011 in the Pismo Beach Council Chambers. The hearing provided an opportunity for the City's customers, residents, and employees to learn and ask questions about the current and future water supply of the City.

### **1.3.1 Data Sources and Previous Reports**

This UWMP was prepared by compiling data from a variety of sources, including federal, state, and local government agencies. In addition, existing documents concerning water management in the City and surrounding areas were used. The following documents were utilized in the development of this UWMP:

- Urban Water Management Plan, City of Pismo Beach, 2005
- General Plan/Local Coastal Plan, City of Pismo Beach, 1992 (and 1998 and 2010 amendments)
- Draft Price Canyon Specific Planning Area "R," Spanish Springs Specific Plan, August 2011
- Draft Environmental Impact Report, Price Canyon Planning Area, General Plan Update, SOI Change, Annexation, and Specific Plan, City of Pismo Beach, 2010
- Los Robles Del Mar Area Annexation, Addendum to the Certified Final Environmental Impact Report and Final Supplemental EIR (SCH1996103448), 2010
- Annual Monitoring Report, Northern Cities Management Area, 2010

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<sup>1</sup> Source: <http://www.pismo beach.org/>

- Water Reuse Study, City of Pismo Beach, 2007
- Water Master Plan, City of Pismo Beach, 2004
- Wastewater Collection System Master Plan, City of Pismo Beach, 2000
- Wastewater Facilities Project Report, City of Pismo Beach, 2002

## 1.4 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

Pursuant to the requirements of the UWMPA, this section summarizes the adoption, submittal, and implementation of the City's 2010 UWMP.

### Law

*10621 (c). The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640)*

*10642. After the hearing, the plan shall be adopted as prepared or as modified after the hearing.*

*10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.*

*10644 (a). An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.*

*10645. Not later than 30 days after filing a copy of its plan with the department, the urban water supplier, and the department shall make the plan available for public review during normal business hours.*

### 1.4.1 Plan Adoption

The City prepared the 2010 UWMP during the summer and fall of 2011. The plan was adopted by its City Council on September 20, 2011. Changes made to the UWMP as a result of the public hearing were done so before submittal to DWR and other appropriate agencies. A copy of the adopting resolution is provided in Appendix C.

### 1.4.2 Plan Submittal

The City submitted the UWMP to the DWR on or before October 7, 2011. Within 30 days of submitting the UWMP to DWR, the adopted UWMP was made available for public review during normal business hours at the locations specified for the viewing of the Draft 2010 UWMP, submitted to the California State Library, and submitted to San Luis Obispo County. Appendix D provides verification that the adopted UWMP was submitted to the agencies listed above within the required timeline.

If major changes are made to this 2010 UWMP after adoption by the City, the City will hold an additional public hearing and the City Council will readopt the plan.

### **1.4.3 Plan Implementation**

As part of this UWMP, the City intends to implement on-going and future action items. Timelines for the anticipated implementation schedule of specific activities/programs are presented in the body of the report as the activities and programs are discussed.

## **1.5 REPORT ORGANIZATION**

This report is organized according to the recommended format by the DWR's Guidebook to Assist Urban Water Suppliers to prepare a 2010 Urban Water Management Plan (Guidebook). The UWMP contains seven chapters, followed by appendices that provide supporting documentation for the information presented herein. The chapters are as follows:

- Chapter 1 – Plan Preparation
- Chapter 2 – System Description
- Chapter 3 – System Demands
- Chapter 4 – System Supplies
- Chapter 5 – Water Supply Reliability and Water Shortage Contingency Planning
- Chapter 6 – Demand Management Measures
- Chapter 7 – Completed Urban Water Management Plan Checklist

Additionally, the chapters are preceded by an UWMP Contact Sheet.

## **1.6 CLIMATE CHANGE**

DWR guidelines suggest that urban water suppliers consider the potential effects related to climate change in their 2010 UWMPs. However, there are currently no specific climate change requirements in the UWMPA or in the Water Conservation Bill of 2009. Therefore, it is left to each supplier's discretion as to whether or not to account for the potential effects of climate change in their 2010 UWMP.

For the purposes of this 2010 UWMP, the City has opted not to include information or analysis related to climate change. If there are specific requirements for addressing climate change in UWMPs in the future, the City will incorporate these in their 2015 UWMP.

## **1.7 ABBREVIATIONS**

To conserve space and improve readability, this report includes many abbreviations. The abbreviations are spelled out in the text the first time they are used and are subsequently identified by abbreviation only. A summary of the abbreviations used in this report is provided in the report Table of Contents.

## **1.8 ACKNOWLEDGEMENTS**

Carollo Engineers wishes to acknowledge and thank the following City Staff, whose cooperation and courtesy in obtaining a variety of necessary information were valuable components in completing and producing this report.

Dwayne Chisam, P.E.	Public Works Director/City Engineer
Stu Stewart	Wastewater Supervisor
Tom Hembree	Water Supervisor

The following staff of Carollo Engineers was primarily involved in the preparation of this plan:

David Stringfield, P.E.	Principal-in-Charge
Thomas Greci, P.E.	Project Manager
Ryan Orgill, P.E.	Project Engineer
Maggie Herzog, E.I.T.	Staff Engineer
Debra Dunn	GIS/Graphics

## SYSTEM DESCRIPTION

The Urban Water Management Planning Act (UWMPA) requires that the Urban Water Management Plan (UWMP) include a description of the water purveyor's service area and various aspects of the area served including climate, population, and other demographic factors.

### Law

*10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:*

*10631. (a). Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.*

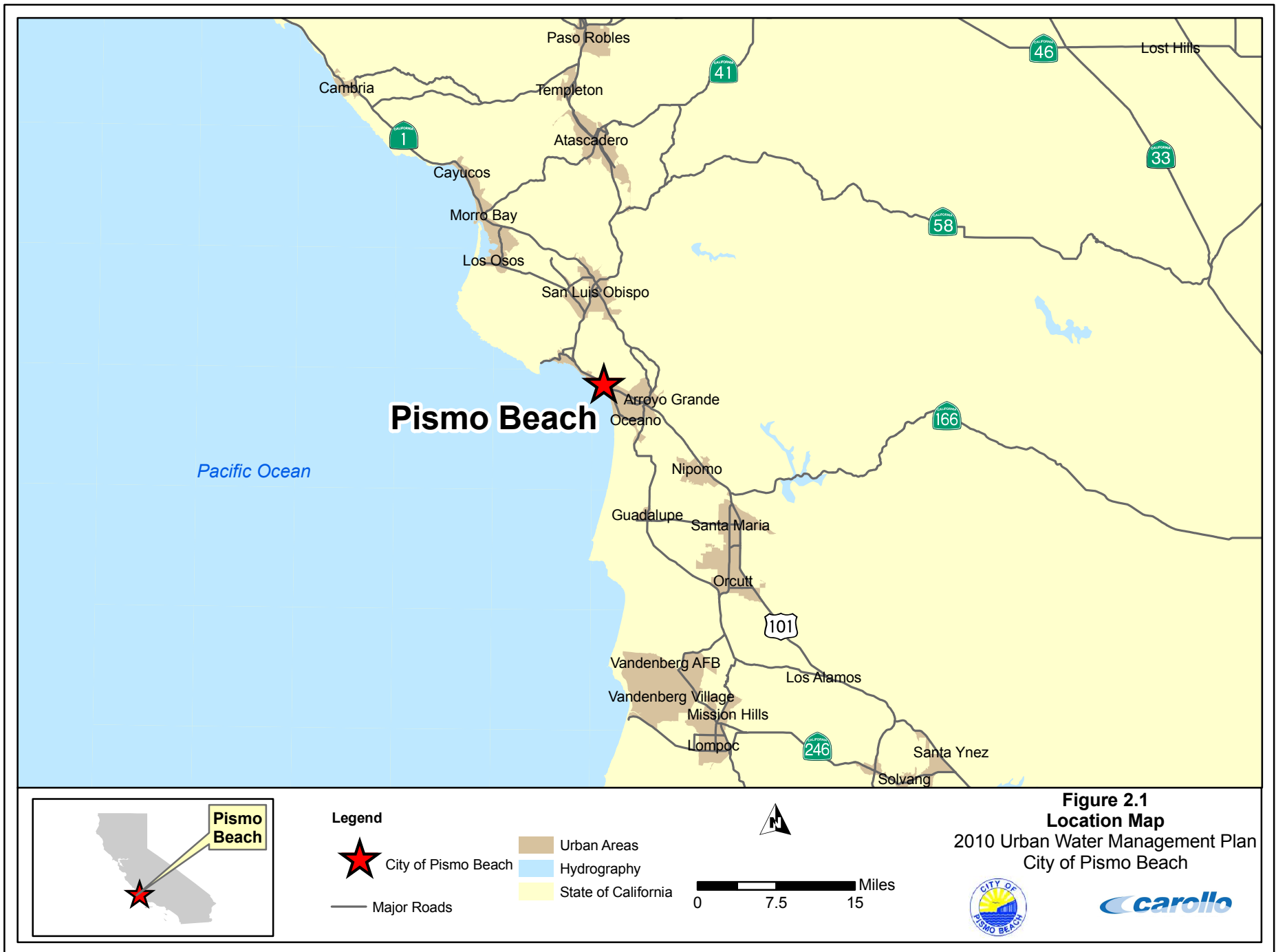
## 2.1 SERVICE AREA PHYSICAL DESCRIPTION

The City of Pismo Beach (City) is located in San Luis Obispo County (County) in the central coastal region of California (Figure 2.1). The City is considered a part of the area known as "Five Cities" in the South County, which includes the incorporated cities of Arroyo Grande, Grover Beach, and Pismo Beach, as well as the unincorporated Oceano Community Services District. Interstate Highway 101 runs from north to south through the City, which serves as the major connecting corridor to San Luis Obispo (approximately 13 miles north), Santa Maria (approximately 20 miles south), and Santa Barbara (approximately 80 miles south). The City is bordered by the Pacific Ocean on the west and Price Canyon on the east. Elevations within the City limits range from zero feet above mean sea level (MSL) to approximately 600 feet above MSL.

A large portion of the City lies within the Coastal Zone as designated by the California Coastal Act of 1976 (Coastal Act). Since the City's western border stretches along the Pacific Ocean shoreline for approximately seven miles, the City is required to have a Local Coastal Plan that is certified by the State Coastal Commission; the City's General Plan serves additionally as its Local Coastal Plan.

The City's has historically been a popular tourist destination, and tourism continues to be the dominant economic sector in the City. Though the City's permanent population (discussed in Section 2.2) is relatively small, visitors during the summer and on holidays can increase the population from 33 percent up to two or sometimes three hundred percent.<sup>1</sup>

<sup>1</sup> Source: City of Pismo Beach. (1992). General Plan.



### **2.1.1 Planning Areas**

The City's General Plan, updated in 1992 and amended several times between 1998 and 2010, identifies boundaries associated with two planning areas: the incorporated area within the City limits and the unincorporated area, which is a combination of the Sphere of Influence (SOI) and Extended Planning Area. On February 19, 2008, the City Council authorized the initiation of a General Plan Update study for properties within Price Canyon, including lands currently within the adopted SOI and abutting properties within the City's Extended Planning Area.<sup>2</sup> The SOI descriptions provided in this report include the City's current SOI as of the 1992 General Plan update in addition to the proposed SOI expansion detailed in the Price Canyon Specific Plan and Los Robles del Mar (LRDM) Area Annexation Addendum.

The City's SOI (Figure 2.2) represents the probable ultimate physical boundaries and service area to which the City may extend its services and project its growth. The County Local Agency Formation Commission (LAFCo) adopted the City's original SOI in 1983. The SOI was amended in 1987 to include the Los Robles del Mar property on Oak Park Boulevard, and again in 2002 to include Spanish Springs south ranch and the Thille property. The proposed SOI, included in Figure 2.2, is coterminous with the boundaries of the Price Canyon Planning Area, a development project currently in its planning stages. The proposed SOI change and Price Canyon Specific Plan (Specific Plan) is discussed in more detail in Section 0 of this UWMP. This UWMP assumes that the City's current and future water system will not extend beyond the boundaries of the current SOI described in the General Plan and the proposed SOI for the Price Canyon Planning Area and LRDM annexation.

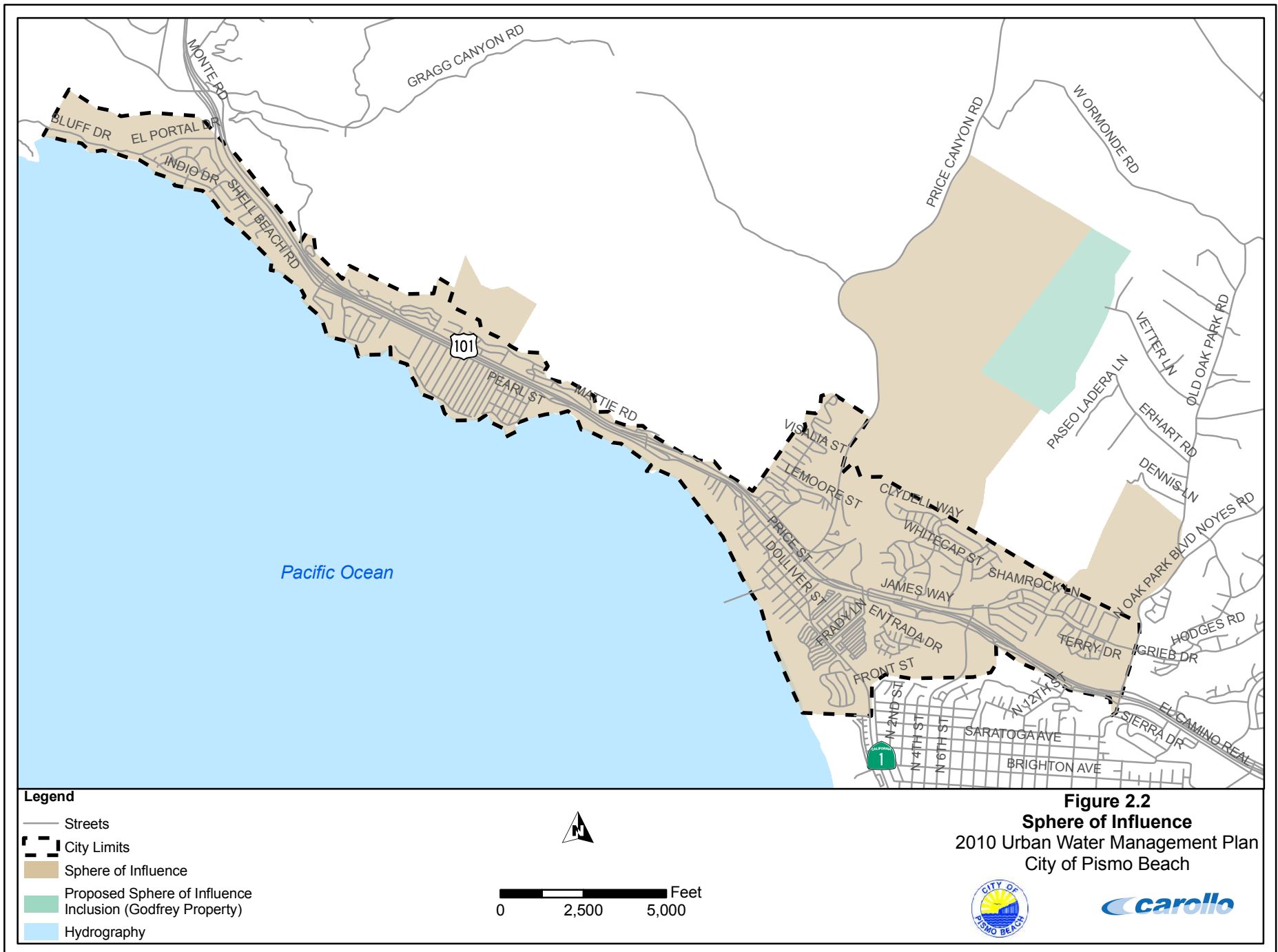
The City's Extended Planning Area encompasses the SOI and any land outside its boundaries that may be considered in the City's future planning efforts (Figure 2.3). By establishing an Extended Planning Area, the City communicates its interest or concern for land areas currently under the jurisdiction of the County or neighboring cities.

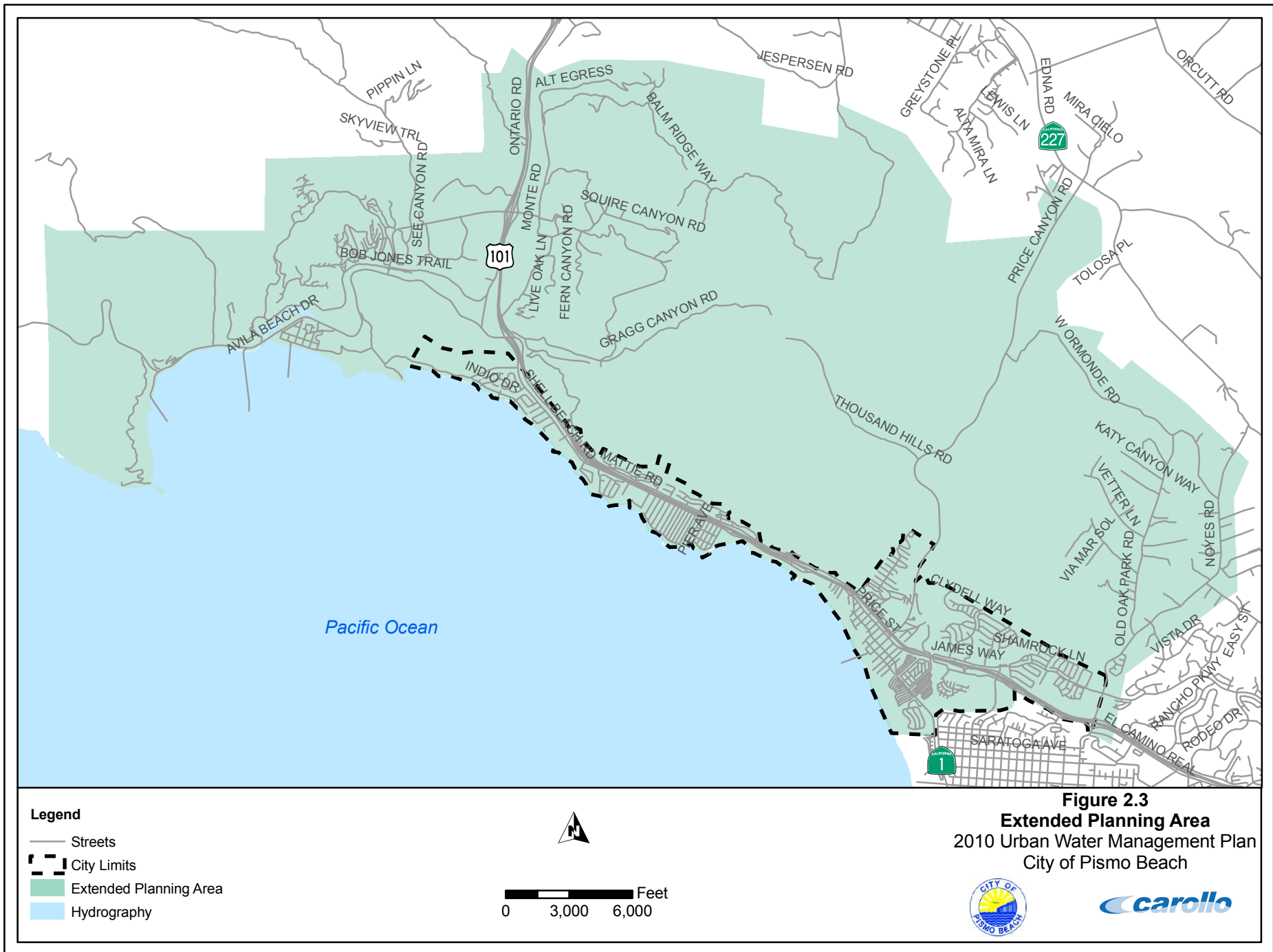
### **2.1.2 Government**

The incorporated area of the City is governed by a City Council/City Manager form of government. The City Council is comprised of five members who are selected from a municipal election to serve a four-year term; the Mayor serves a two-year term. The City is a general law municipality, governed by the State of California in conjunction with its local ordinances.

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<sup>2</sup> Source: City of Pismo Beach. (Sept 2010). Draft Environmental Impact Report on Price Canyon Planning Area, General Plan Update, SOI Change, Annexation and Specific Plan.



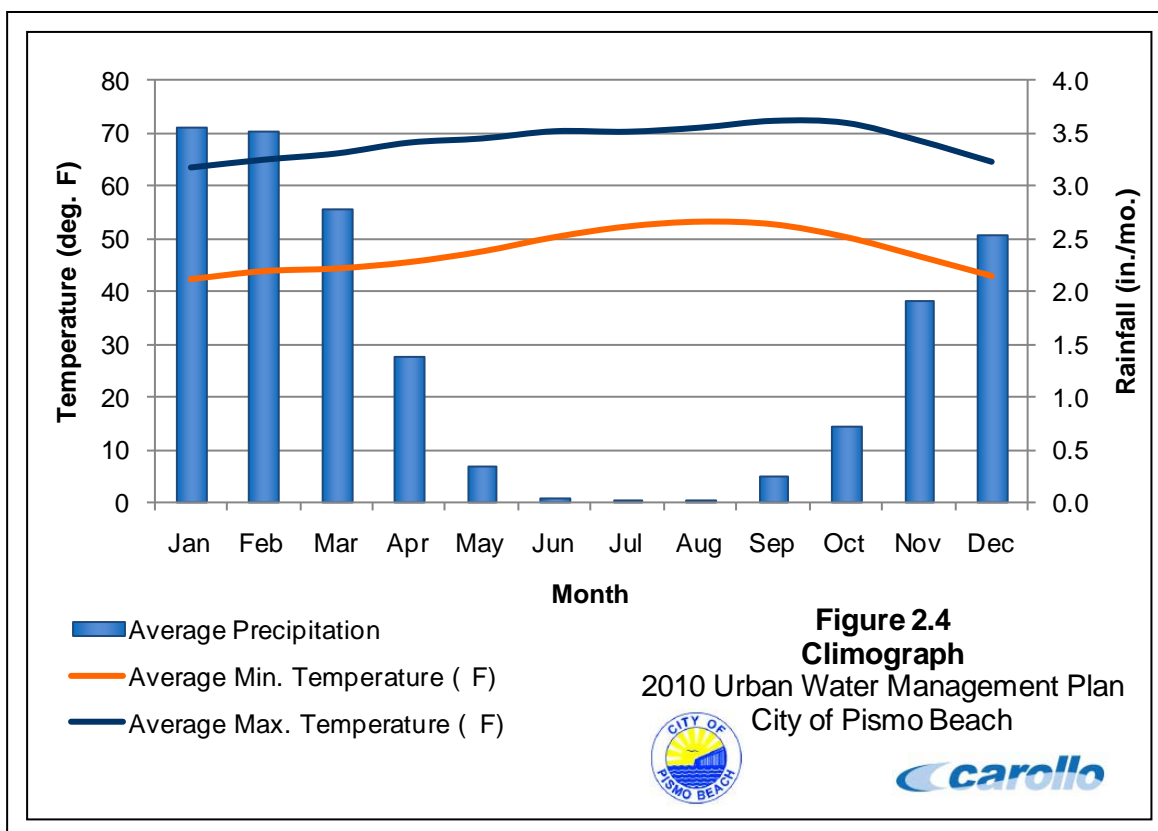


### 2.1.3 Service Area Climate

The climate in the City can be classified as coastal with average rainfall rates of about 17.1 inches per year. Most of the annual precipitation occurs during the period from November through April. Table 2.1 summarizes monthly average reference evapotranspiration (ET<sub>o</sub>) rates, rainfall, and temperature. The average monthly precipitation and average monthly temperatures are also shown on Figure 2.4.

<b>Table 2.1      Climate 2010 Urban Water Management Plan City of Pismo Beach</b>					
<b>Month</b>	<b>Average ET<sub>o</sub><sup>(1)</sup> (inches)</b>	<b>Average Rainfall<sup>(2)</sup> (inches)</b>	<b>Average Min. Temperature<sup>(2)</sup> (°F)</b>	<b>Average Max. Temperature<sup>(2)</sup> (°F)</b>	<b>Average Temperature<sup>(2)</sup> (°F)</b>
January	2.21	3.55	42.4	63.3	52.9
February	2.50	3.51	43.9	64.8	54.4
March	3.80	2.79	44.4	66.0	55.2
April	5.08	1.39	45.6	68.1	56.9
May	5.70	0.34	47.6	68.9	58.3
June	6.19	0.05	50.3	70.3	60.3
July	6.43	0.03	52.3	70.2	61.3
August	6.09	0.02	53.2	71.0	62.1
September	4.87	0.26	52.7	72.3	62.5
October	4.09	0.73	50.3	71.9	61.1
November	2.89	1.91	46.7	68.5	57.6
December	2.28	2.54	43.0	64.4	53.7
<b>Annual</b>	<b>52.13</b>	<b>17.12</b>	<b>47.7</b>	<b>68.3</b>	<b>58.0</b>
<b>Notes:</b> 1. Source: California Irrigation Management Information System (CIMIS), Station No. 202 Nipomo (period of record 2006-2007). 2. Source: Western Regional Climate Center, Station: Station: 046943 Pismo Beach (period of record 1949 to 2006).					

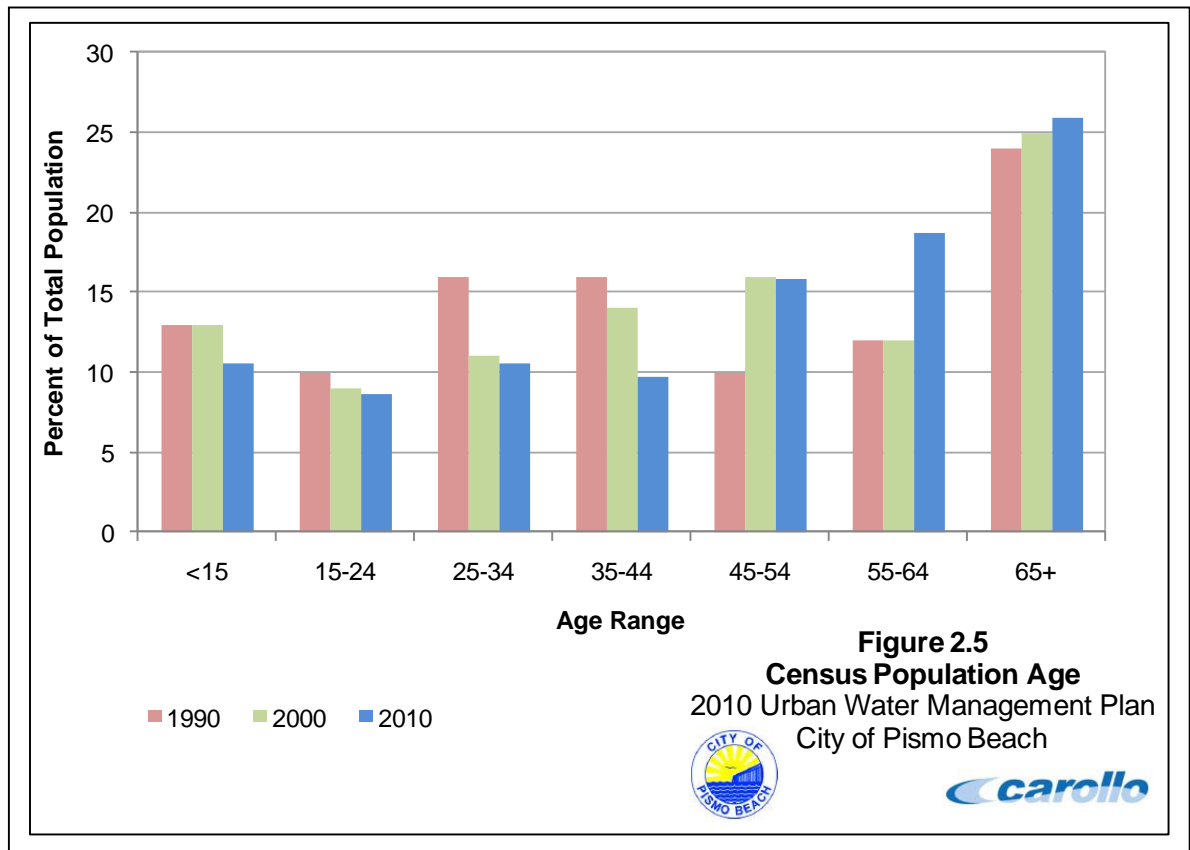
The average annual temperature is 58 degrees Fahrenheit (°F). The City has mild weather year-round, with typically warm daytime temperatures and cool nighttime temperatures. The City does not have extreme seasonal variations, though the area is subject to normal weather fluctuations often experienced in marine environments.



## 2.2 SERVICE AREA POPULATION

As of January 1, 2010, the City had a population of 7,676 people in its incorporated areas, representing 2.9 percent of San Luis Obispo County. While the City saw moderate growth of 1.4 percent between 1995 and 2000, the City's population has declined each year since 2000. In fact, the City's average annual growth rate between 1995 and 2010 is a net decline of 0.3 percent annually, and, as of 2010, has nearly returned to its 1990 census population of 7,669.<sup>3</sup> The reasons for the City's long-term population decline is likely due to a number of factors, including the high cost of living, an aging population, and limited development. Figure 2.5 shows historical change in the age of the City's population between 1990 and 2010, with the bulk of the population shifting to greater than 45 years of age. This may indicate fewer new people moving to the area, but retention of an aging population.

<sup>3</sup> Source: California Department of Finance.



Future population growth in the City will be a function of two things: re-growth within the current City limits and growth as a result of new developments. The City's General Plan specifies a limit on annual growth of 3 percent. Based on historic population trends, it is unlikely that the City will experience growth that meets the 3 percent annual limit. If buildout within the current City limits, estimated at 9,414,<sup>4</sup> were assumed to occur by 2035, the City would experience an average annual growth rate of approximate 0.8 percent. This growth rate is reasonable compared to the growth trend experienced between 1995 and 2000, and considering the City's recent population decline. Therefore, for planning purposes, this UWMP will assume an annual growth within the current City limits of 0.8 percent until buildout is reached, potentially by 2035.

Additionally, the City expects to experience population growth as a result of two primary development projects (described in Section 2.3): Price Canyon and Los Robles Del Mar. Both projects include large residential developments, in addition to commercial, retail, and recreation areas that will encourage movement to the City. Based on current planning

<sup>4</sup> Buildout within the current city limits is expected to be 9,414, based on a 2001 Community Development Department Memorandum, included in Appendix E.

documents available for both development projects, Price Canyon and Los Robles Del Mar have the potential to increase the City's population by up to 2,440 people.<sup>5</sup> Growth as a result of the development in Price Canyon is based on the most recent available planning estimates, and may change depending on actual development in the Price Canyon Planning Area. This estimate utilizes the population densities forecasted in the City's General Plan Land Use Element (most recently updated in 2008), which provides an estimate of 2.05 persons/unit within the City 1981 City limits, and 2.5 persons/unit in the SOI.<sup>6</sup> While there is currently no specific implementation timeline for these developments, both developments may be completed within the next 15 to 25 years. Therefore, projected growth due to the Price Canyon and Los Robles Del Mar developments will be applied gradually through the 2035 planning period.

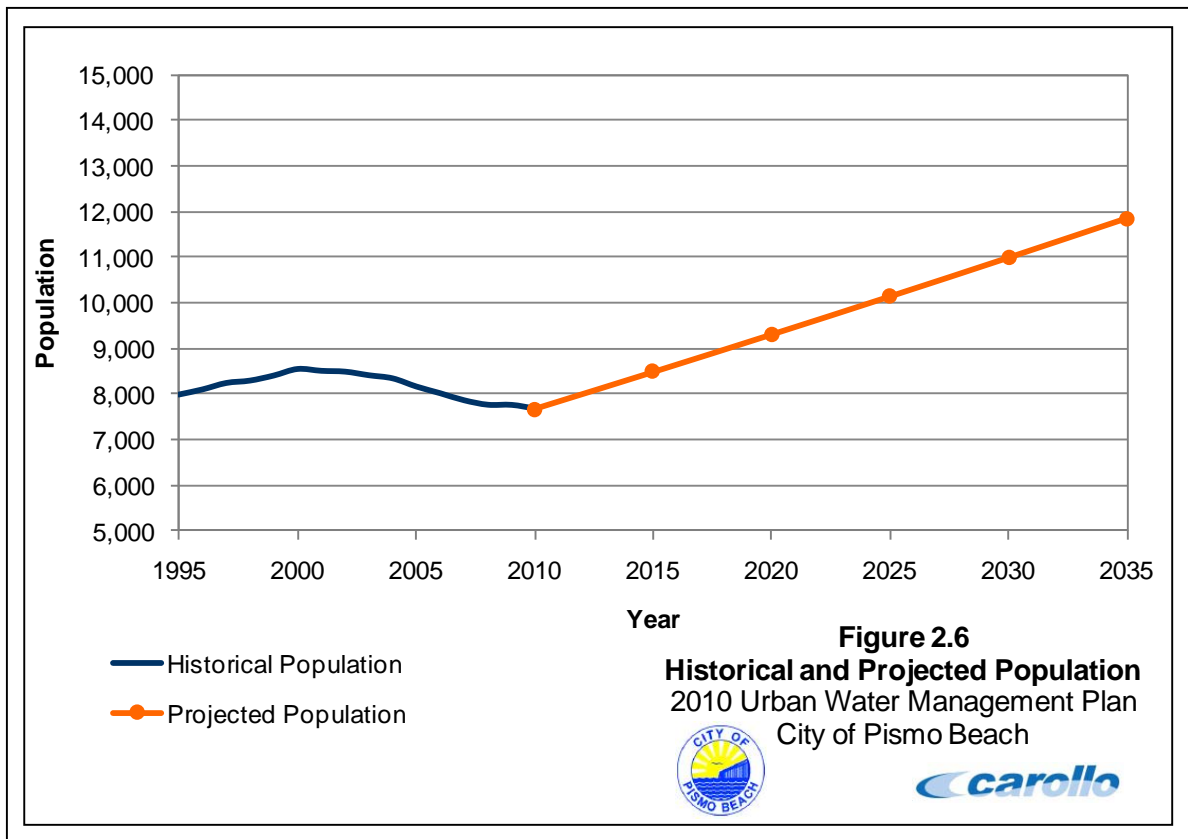
Table 2.2 describes the City's projected population based on the planning criteria described above. Figure 2.6 provides a graphical representation of the City's historical and projected population.

<b>Table 2.2      Population - Current and Projected (Guidebook Table 2) 2010 Urban Water Management Plan City of Pismo Beach</b>							
<b>Years</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>Data Source</b>
Service Area Population <sup>(2)</sup>	7,676	8,484	9,305	10,140	10,989	11,854	Source <sup>(3)</sup>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR. 2. Service area population is defined as the population served by the distribution system. 3. Projected population based on estimates of (1) regrowth within the City's current City limits, up to its buildout population of 9,414, and (2) the potential population increase from the current SOI, applied gradually through 2035.							

According to 2000 Census, the City's Median Household Income (MHI) in year 1999 was \$46,396. The State defines a disadvantaged community as a community with an annual MHI that is less than 80 percent of the statewide MHI. Using 2000 U.S. Census data, 80 percent of the statewide annual MHI is approximately \$38,000. Therefore, the City is not considered a "disadvantaged community." The 2000 Census gives the racial demographic distribution of the City as the following: 91.3 percent white, 0.6 percent African American, 0.7 percent American Indian, 2.9 percent Asian, and 4.5 percent other or mixed races.

<sup>5</sup> Based on best available planning information and conservative land use estimates of: 520 residences and 360 senior living units proposed in Price Canyon, and 312 residences proposed in Los Robles Del Mar (only properties within current SOI are included).

<sup>6</sup> Source: City of Pismo Beach. General Plan. Land Use Element (Amended 2008).



## 2.3 EXPANSION PROJECTS

The California Water Code requires public water systems, as part of the Water Supply Assessment process required by the California Environmental Quality Act (CEQA), to determine whether the water demand associated with a major development (or “project”) is included in the agency’s most recently-adopted UWMP. Inclusion of any proposed development projects in the UWMP greatly simplifies the Water Supply Assessment process, because the UWMP can be referenced directly in the Water Supply Assessment. Therefore, it benefits the City to incorporate any major developments in the UWMP that are considered “projects” by the California Water Code, as defined below.

### Law

*10910. (a) Any city or county that determines that a project, as defined in section 10912, is subject to the California Environmental Quality...*

*10912. For the purpose of this part, the following terms have the following meanings:*

*10912 (a) “Project” means any of the following:*

- (1) A proposed residential development of more than 500 dwelling units.*
- (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.*
- (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.*
- (4) A proposed hotel or motel, or both, having more than 500 rooms.*

- (5) *A proposed industrial, manufacturing or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.*
- (6) *A mixed-use project that includes one or more of the projects specified in this subdivision.*
- (7) *A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.*

There are two primary development projects currently planned for the City: Price Canyon and Los Robles Del Mar (LRDM). The projects are described below, but are both still in the planning stages. As such, details about the proposed developments may be refined or changed as the planning process continues.

### **2.3.1 Price Canyon**

Price Canyon is comprised of several different properties that are proposed for development, some of which are within the current SOI and some of which are proposed for annexation and inclusion in the SOI. Price Canyon Planning Area (Planning Area) properties currently within the SOI include South Ranch, Loughhead Ranch, and Big Bird Ranch; properties not in the current SOI but proposed for annexation include the Godfrey Property and the Preserve (Wilde) Property. The municipal water demand forecasts in this UWMP including planning for only the proposed development within the City's current SOI.

The City is currently in the process of developing the Price Canyon Planning Area "R" Specific Plan (hereafter Specific Plan), which specifies the development of the Price Canyon Planning Area (Planning Area). The City's Specific Plan is comprised of several individual Specific Plans, including ones for the Spanish Springs and Big Bird Planning Areas. Appendix F provides a figure that describes the properties included in the Spanish Springs Specific Plan, and illustrates the location of the aforementioned properties scoped for development.

The Specific Plan describes the Price Canyon development to be a combination of residential, resort commercial, agricultural, recreational, and conservation land uses. The amount of development for each proposed land use type is routinely being modified based on the planning goals of developers and the City. The population projections resulting from the Price Canyon developments (described in Section 2.2) are based on the best available Specific Plan estimates. In general, the Planning Area is anticipated to include the following major components:

- single- and multi-family residences, including affordable housing units that may be mixed between multi-family and single-family designs;
- a senior residential village;
- a boutique hotel containing conference and other visitor-serving facilities (restaurants, spa facilities, etc.);
- 9-hole golf course;

- agricultural open space, including vineyards and orchards;
- public parks;
- substantial acreage of passive and conservation open space.

The Planning Area properties are located north of the City limits along the eastern side of Price Canyon Road. The topography of the area includes level floodplains, gentle slopes, and steep hillside terrain that are comprised of open grasslands, chaparral, oak woodlands, and riparian vegetation. Pismo Creek extends through the valley floor in a north-to-south direction. Existing land uses on the properties proposed for development in the Specific Plan are primarily undeveloped rural lands historically used for grazing and other agriculture. Land uses abutting the study area properties within the County are primarily undeveloped rural lands, suburban and rural residential development, and urban residential development within the City limits along the southern boundary of the Planning Area.

The Specific Plan was initiated as a part of the City's General Plan Update process, which began in February 2008 when the City authorized the initiation of a study of the Planning Area, SOI, and Extended Planning Area. The General Plan Update intends to determine appropriate land uses and densities for the Planning Area, and determine appropriate changes to the City's SOI. To date, the City has prepared an Initial Study (pursuant to the California Environmental Quality Act), a Constraint Study, and potential land use scenarios for consideration in the General Plan Update for the Planning Area. On July 21, 2009, the City Council adopted a resolution to accept the Constraint Study and draft General Plan policies and land use scenario, and directed staff to proceed with the EIR and review of a long-range plan for the area.

The impact of the proposed Specific Plan on water supply resources is a primary area of focus for all design aspects of the Price Canyon project. The Draft EIR (issued September 2010) provides detailed discussion about impacts and proposed mitigation measures dealing with water issues. In addition, the groundwater, surface water, and state water supply and reliability factors have been studied extensively by various subconsultants for the City.

According to the Draft EIR, the Specific Plan will be implemented in four phases over the course of 15 to 20 years. While the Draft Specific Plan provides a description of the intended development in Price Canyon, it should be assumed that refinements to the land use and development plans will occur. As such, the impact of the Specific Plan implementation on water resources will be gradual and spread out over the course of the phased construction.

### **2.3.2 Los Robles Del Mar**

The LRDM annexation area encompasses approximately 154 acres adjacent to the eastern edge of the City, near the Toucan Terrace sub-area. The development plans for this area include residential development, open space, and parks. Up to 312 dwelling units are

proposed, with a land use concept that would create a residential neighborhood with a mixture of housing types, including high-density affordable senior housing, low-density terrace homes, low-density estate homes, custom lots, and rural estate lots. Approximately 71.1 acres of open space is proposed between the residential development areas, for preservation and scenic purposes. Additionally, one neighborhood park and one mini-park are proposed to be installed and to be made accessible to the open space pedestrian trail system.<sup>7</sup>

LRDM was included in the City's SOI and Sphere of Services in 1987, when the development planning of this area first began. The first specific plan for this area was proposed in 1991, followed by City approval and creation of an accompanying environmental impact report (EIR). Following certification of the EIR, progress on LRDM development was inhibited by litigation measures regarding impacts to the onsite school property and other environmental issues. In 1997, the Superior Court upheld the adequacy of the EIR, but cited inconsistencies with the City's General Plan. In 2001, a revised specific plan for the LRDM annexation area was submitted along with a supplemental EIR, and was approved by the City 2004. Between 2005 and 2006, the City completed several studies regarding groundwater resources in the area to complete requirements for approval of the annexation of the LRDM land. LAFCo denied approval of the annexation of LRDM based on the results of these studies. In response, the City revised the water supply plan for the LRDM annexation area to include water from the State Water Project (SWP) only, instead of use of groundwater. Additional history of the LRDM annexation and development process and water supply plan is described in the Los Robles Del Mar Specific Plan Area Annexation, Addendum to the Certified Final EIR and Final Supplemental EIR (November 2010).

The City recently approved the transfer of water rights of 100 acre-feet per year (AFY) of SWP allocation from the Pismo Beach-98, LLC Preserve Property to the LRDM Annexation. This 100 AFY volume is already included in the City's contracted allocation of State Water, and simply constitutes a transfer of water rather than additional need. Therefore, allocation of 100 AFY to the LRDM annexation is not expected to cause any significant negative impacts to water supply available to the City. Additional discussion about the City's water supply sources is included in Chapter 4 of this UWMP.

Inherently, each phase of implementation of both the Price Canyon and LRDM developments will have varying effects on population, water resources, and waste production. Based on available planning information, the supply and demand forecasts provided in this UWMP will include the projected impacts on water resources and demand as a result of both developments. If the development plans for either location change significantly, subsequent demands should be reevaluated and compared to available

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<sup>7</sup> Source: City of Pismo Beach. (November 2010). Los Robles Del Mar Area Annexation. Addendum to the Certified Final Environmental Impact Report and Final Supplemental EIR (SCH 1996103448).

sources to ensure adequate supply for the City. The historical and projected water demands for the City are described in Chapter 3, while water supply sources are described in Chapter 4 of this UWMP.

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**SYSTEM DEMANDS**

This chapter describes the City of Pismo Beach's (City's) base daily per capita (baseline) water use, the interim and urban water use targets, water system demands, water demand projections, and water use reduction plan.

### **3.1 BASELINES AND TARGETS**

The Urban Water Management Planning Act (UWMPA) requires that the Urban Water Management Plan (UWMP) identify a baseline water demand, urban water use target, and interim urban water use target for the City.

Law

*10608.20 (e). An urban retail water supplier shall include in its urban water management plan...due in 2010 the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data*

The baseline daily per capita use is the first step in determining the City's urban water use targets over the planning horizon. The current per capita use sets the baseline for which the urban and interim urban water use targets are determined. These targets are necessary to judge compliance with the 2020 use reductions set forth in the Water Conservation Bill of 2009 (SBx7-7).

The baselines and targets summarized in this section apply specifically to the City. The California Department of Water Resources (DWR) allows agencies to participate in regional alliances in which water use baselines and targets are determined regionally, provided certain criteria be met. The City has elected not to participate in such an alliance.

#### **3.1.1 Baseline Water Use**

The first step in developing the baseline water use for the City is determining the applicable range and years for which the baseline average will be calculated. The UWMPA stipulates an agency may use either a 10 or 15-year average to determine their baseline. If 10 percent of total urban retail water deliveries in 2008 were from recycled water, then the agency can use a 15-year average baseline if it chooses. The City does not currently have the infrastructure or treatment ability in place to recycle water, and therefore has not utilized recycled water in the past. For this reason, a 10-year average was used for baseline determination. In addition to the 10-year baseline, a 5-year baseline is also calculated, which is used to establish the minimum criteria for the City's use reduction targets. A summary of the 2008 total and recycled water deliveries, 10-year baseline range, and 5-year baseline range is included in Table 3.1.

<b>Table 3.1 Base Daily Per Capita Water Use: 10 to 15-Year Range (Guidebook Table 13) 2010 Urban Water Management Plan City of Pismo Beach</b>			
<b>Base</b>	<b>Parameter</b>	<b>Value</b>	<b>Units</b>
10- to 15-Year Base Period	2008 total water deliveries	2,208	AFY
	2008 total volume of delivered recycled water	0	AFY
	2008 recycled water as a percent of total deliveries	0.0%	Percent
	Number of years in base period	10	Years
	Year beginning base period range	2001	--
	Year ending base period range	2010	--
5-Year Base Period	Number of years in base period	5	Years
	Year beginning base period range	2004	--
	Year ending base period range	2008	--
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.			

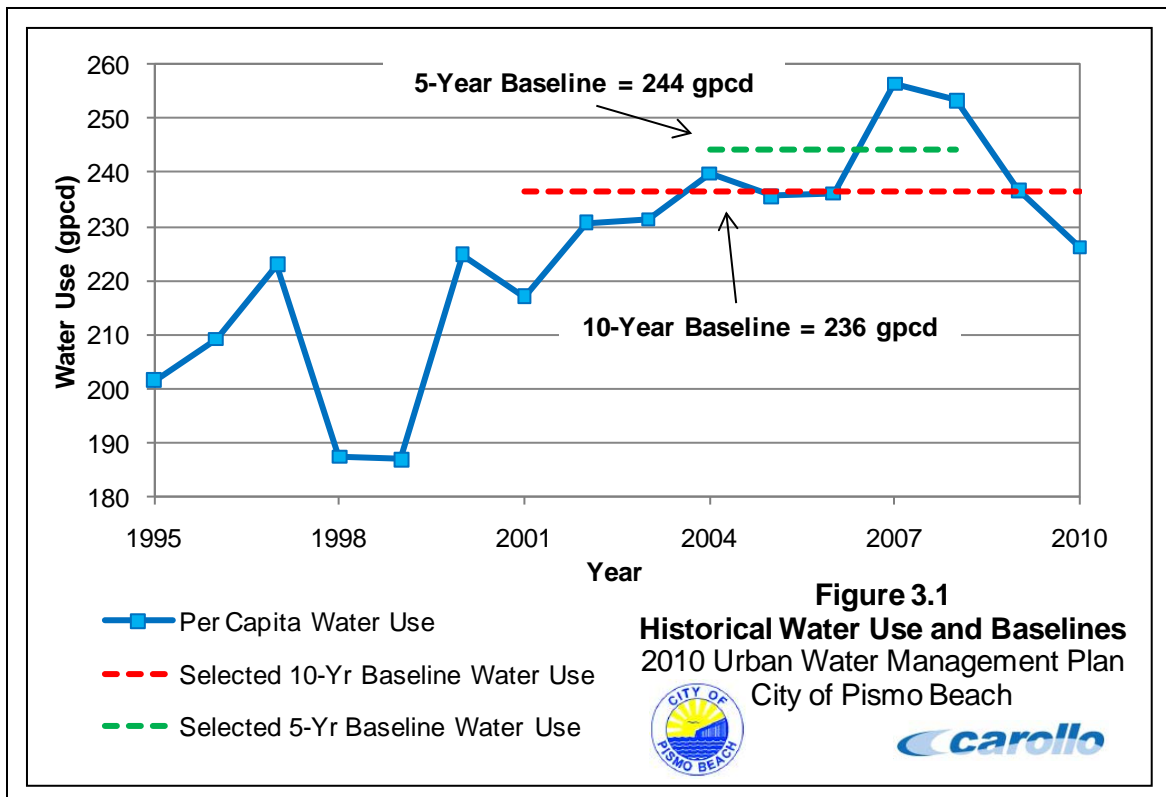
The data used to calculate the 10-year baseline is included in Table 3.2. The UWMPA requires a continuous range with the end of the range ending between December 31, 2004 and December 31, 2010 be used for the baseline determination. As shown in Table 3.1 and Table 3.2, the City's selected 10-year base period begins in year 2001 and ends in year 2010.

The data used to calculate the 5-year baseline is included in Table 3.3. The UWMPA requires that a continuous range, with the end of the range ending between December 31, 2007 and December 31, 2010, be used for baseline determination. As shown in Table 3.3, the City's selected 5-year base period begins in year 2004 and ends in year 2008.

The City's historical water production for the period 1995 through 2010 is shown in Figure 3.1. This figure also depicts the selected 5-year and 10-year baseline values.

<b>Table 3.2 Base Daily Per Capita Water Use: 10-Year Range (Guidebook Table 14)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>				
Base Period Year		Distribution System Population	Daily System Gross Water Use (MGD)	Annual Daily Per Capita Water Use (gpcd)
Sequence	Calendar Year			
1	2001	8,497	1.84	217
2	2002	8,479	1.96	231
3	2003	8,401	1.94	231
4	2004	8,333	2.00	240
5	2005	8,155	1.92	236
6	2006	8,010	1.89	236
7	2007	7,858	2.01	256
8	2008	7,761	1.97	253
9	2009	7,758	1.84	237
10	2010	7,676	1.74	226
<b>Base Daily Per Capita Water Use</b>				<b>236</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR.				

<b>Table 3.3 Base Daily Per Capita Water Use: 5-Year Range (Guidebook Table 15)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>				
Base Period Year		Distribution System Population	Daily System Gross Water Use (MGD)	Annual Daily Per Capita Water Use (gpcd)
Sequence	Calendar Year			
1	2004	8,333	2.00	240
2	2005	8,155	1.92	236
3	2006	8,010	1.89	236
4	2007	7,858	2.01	256
5	2008	7,761	1.97	253
<b>Base Daily Per Capita Water Use</b>				<b>244</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR.				



### 3.1.2 Target Water Use

SBx7-7 is the new law governing water conservation in California that was enacted November 2009. The law requires that all water suppliers increase water use efficiency with the overall goal to decrease per-capita consumption within the state by 20 percent. SBx7-7 required DWR to develop certain criteria, methods, and standard reporting forms through a public process that can be used by water suppliers to establish their baseline water use and determine their water conservation targets (the UWMPA requires urban water suppliers to determine the urban and interim urban water use targets for 2020 and 2015, respectively). DWR provided four different methods to establish water conservation targets. These four methods are summarized in this section

#### 3.1.2.1 Method 1 - Baseline Reduction Method

The Method 1 2020 water conservation target is defined as a 20 percent reduction of average per-capita from the 10-year continuous baseline period. Based on the baseline daily per capita use of 236 gallons per capita per day (gpcd) determined previously (Table 3.2), the target use for Method 1 is 189 gpcd. The 2015 interim water use target is simply the midpoint of the baseline and the 2020 water conservation target, or 213 gpcd for Method 1 in the City's case.

### **3.1.2.2 Method 2 - Efficiency Standard Method**

The 2020 water conservation target of this method is determined by calculating efficiency standards for indoor use separately from outdoor use for residential sectors, and an overall reduction of 10 percent for commercial, industrial, and institutional (CII) sectors. The aggregated total of the efficiency standards in each area is then used to create a conservation target.

Very few agencies within the State have the data necessary to determine a target water use using Method 2. It is not feasible for the City to use this methodology since the City lacks the detailed landscaped area estimates to calculate the landscaped area water use.

### **3.1.2.3 Method 3 - Hydrologic Region Method**

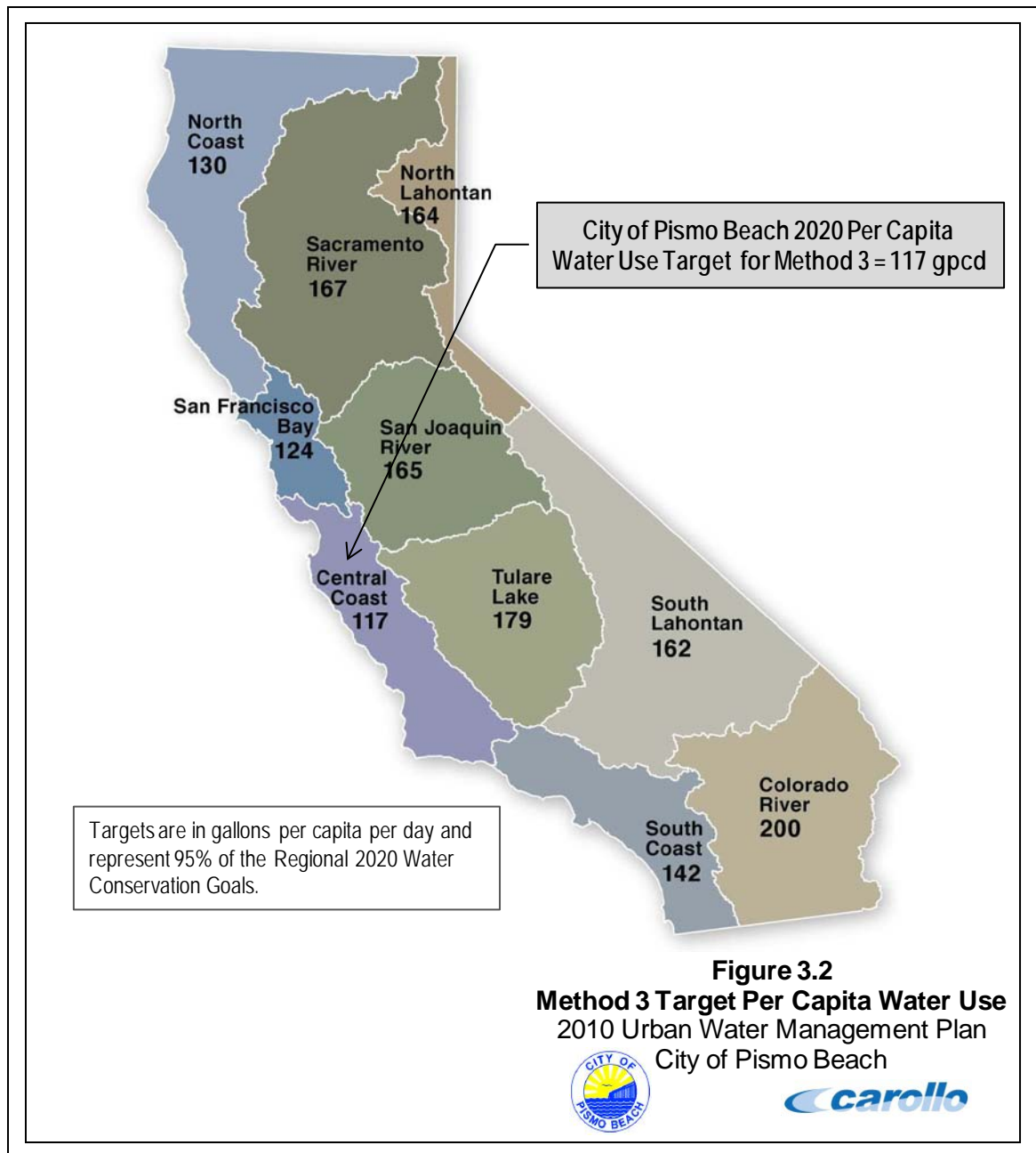
This method uses the ten regional urban water use targets for the state. Based on the water supplier's location within these regions, a static water use conservation target for 2020 is assigned.

Urban water use targets (2020 conservation goals) for the hydrologic regions in California is included in the *DWR Guidebook to Assist Urban Water Suppliers to Prepare a 2010 UWMP* (Guidebook) and shown in Figure 3.2. To determine the target using Method 3, 95 percent of the region-specific conservation goal is calculated. Based on a 2020 target of 123 gpcd for the Central Coast region, the City's Method 3 target is 117 gpcd for 2020. The City's 2015 interim water use target for Method 3 is then calculated to be 177 gpcd.

### **3.1.2.4 Method 4 - BMP Based Method**

Method 4 identifies water savings obtained through identified practices and subtracts them from the baseline daily per capita water use value identified for the water supplier. The water savings identified that can be used to reduce the baseline daily per capita water use value include:

- Indoor residential use savings;
- Commercial, industrial, and institutional savings;
- Landscape and water loss savings; and
- Metered savings.



The Method 4 per capita water use target was calculated using the City's 10-year baseline period (2001 to 2010). A discussion of each of savings components and the subsequent calculated savings specifically for the City is included below.

- Indoor Residential Savings.** Since indoor and outdoor water use is delivered through a single meter, an assumption of 70 gpcd has been provided by DWR for standard residential indoor water use. To determine indoor residential savings potential, the draft provisional method outlines two methodologies. First, a best management practices (BMP) calculator has been developed to sum the savings for

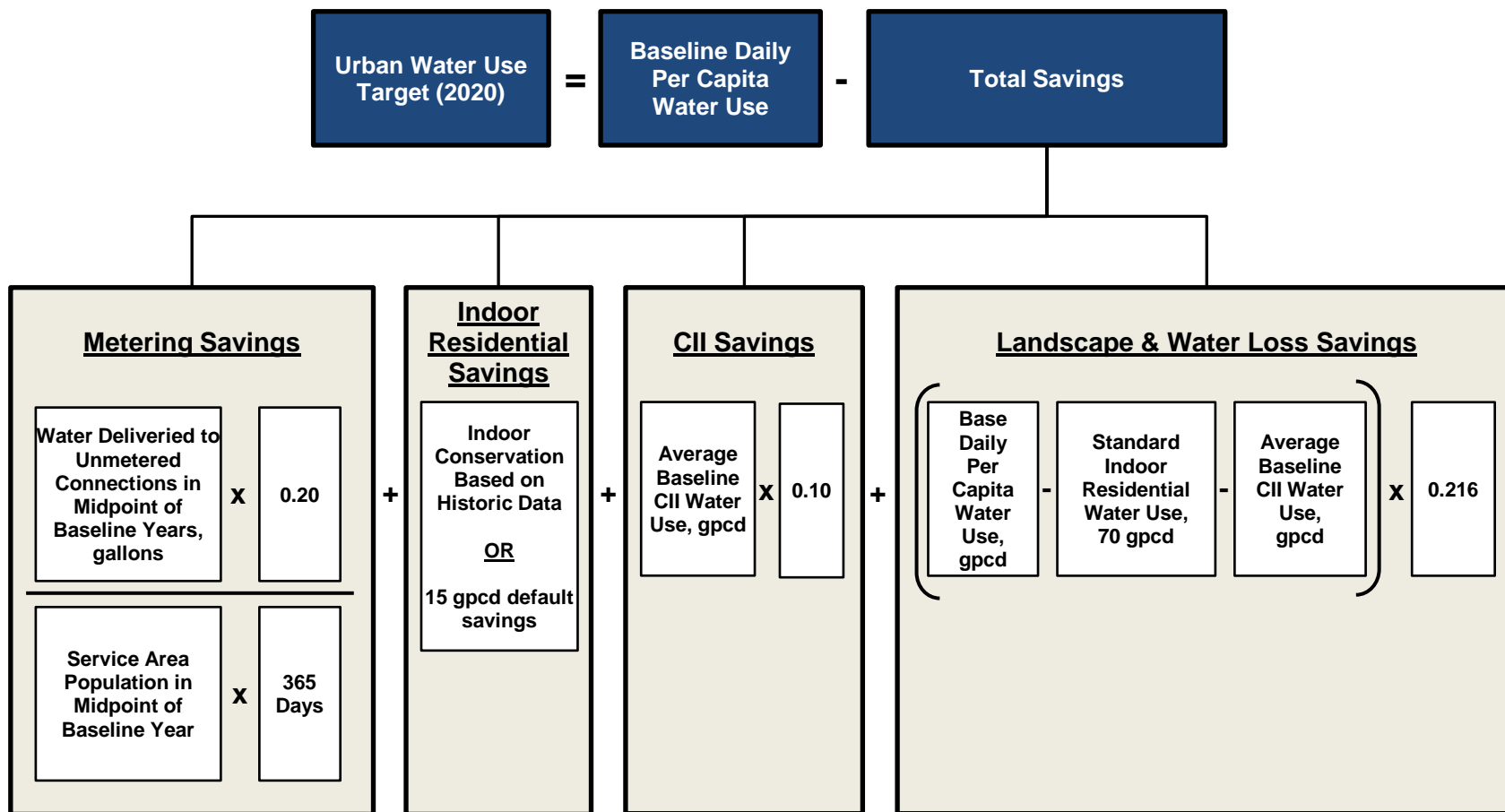
four conservation elements including single and multi-family residential housing toilets, residential washers, and showerheads. The City will use what has been termed the “default option” to determine these savings. Based on the provisional method, this default value is 15 gpcd.

- **Commercial, Industrial, and Institutional Savings.** Baseline CII water use can be established for the City based on data provided in the City’s DWR Public Water Systems Statistics Sheet for years 2001 to 2010. Based on this data, the baseline per capita CII water use is 58 gpcd. The draft provisional method estimates a default value for CII savings of 10 percent. The CII water savings are therefore 6 gpcd.
- **Landscape and Water Loss Savings.** The landscape and water loss water use is determined by subtracting the default indoor water use of 70 gpcd and CII water use of 58 gpcd from the calculated years 2001 to 2010 baseline per capita use. Based on a 2001 to 2010 baseline per capita water use of 236 gpcd, the landscape and water loss use is 108 gpcd. The draft provisional method estimates a default value for landscape and water loss savings of 21.6 percent. The landscape and water loss savings are therefore 23 gpcd.
- **Metered Savings.** Metered savings are considered in addition to the savings attributed to the three sectors previously discussed. Because the City was fully metered in the midpoint year of 2005 (based on the methodology established by DWR) and no unmetered deliveries occurred, the unmetered per capita use was zero gpcd. Therefore, no savings from metering was calculated.

A summary of the Method 4 water use target calculation procedure is shown on Figure 3.3. The City’s 2020 target water use is calculated as the baseline water use minus the total savings (residential indoor, CII, landscape, and water loss, and meter savings). In the City’s case, the total water savings accounts for 44 gpcd, which equates to a 2020 target water use of 192 gpcd in 2020, and a corresponding interim water use target for Method 4 of 214 gpcd in 2015. A summary of baseline water use by sector and individual savings calculated using Method 4 is included in Table 3.4.

#### **3.1.2.5 Minimum Water Use Reduction Requirement**

The final step in determining the applicability of the water use target for the City is to confirm the water use targets meet the minimum reduction requirements as defined by DWR. To confirm the chosen 2020 per capita target, the 5-year average baseline previously determined (Table 3.3) is used. The chosen target (calculated using one of the four methods described above) must be less than 95 percent of the 5-year baseline. In order to meet this minimum criteria, the City’s 2020 target per capita water use must be less than or equal to 232 gpcd.



**Figure 3.3**  
**Method 4 Target Water Use**  
**Calculation Procedure**  
 2010 Urban Water Management Plan  
 City of Pismo Beach



<b>Table 3.4 Method 4 Target Determination Summary</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>	
	<b>Per Capita Water Use (gpcd)</b>
<b>Baseline Water Use</b>	
Residential Indoor <sup>(1)</sup>	70
CII	58
Landscape/Water Loss <sup>(2)</sup>	108
<u>Total</u>	<u>236</u>
<b>Water Savings</b>	
Residential Indoor <sup>(3)</sup>	15
CII <sup>(4)</sup>	6
Landscape/Water Loss <sup>(5)</sup>	23
Metered Savings <sup>(6)</sup>	0
<u>Total</u>	<u>44</u>
<b>Method 4 2020 Target Water Use</b>	<b>192</b>
<b>Method 4 Interim 2015 Target Water Use</b>	<b>214</b>
<b>Notes:</b> 1. Standard value based on guidelines in provisional Method 4. 2. Landscape/Water Loss = Total Baseline Water Use - Residential Indoor Water Use - CII Water Use 3. Standard value based on guidelines in draft provisional Method 4. 4. CII water savings of 10 percent based on guidelines in provisional Method 4. 5. Landscape/water loss savings of 21.6 percent based on guidelines in provisional Method 4. 6. Metered savings of 20 percent based on guidelines in provisional Method 4.	

### 3.1.3 Summary of Baseline and Target Water Use

Based on the 2020 water use targets calculated using the four methodologies described previously, the urban water use target for the City is 192 gpcd. Using the 10-year baseline of 236 gpcd, the 2015 interim water use target is 214 gpcd. This target was determined using Method 4. According to the DWR guidelines, this target is valid since it is less than the minimum 5-year baseline target confirmation criteria of 232 gpcd.

The baseline water use, target per capita use determined based on the four methods, and the selected target and interim target are summarized in Table 3.5.

<b>Table 3.5 Baseline and Target Water Use Summary</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>								
Baselines (gpcd)		Target Based on Each Determination Method (gpcd)				Minimum Reduction Requirement <sup>(3)</sup> (gpcd)	Target <sup>(4)</sup> (gpcd)	Interim Target <sup>(5)</sup> (gpcd)
10-Year <sup>(1)</sup>	5-Year <sup>(2)</sup>	1	2	3	4			
236	244	189	n/a	117	192	232	192	214
<b>Notes:</b> 1. 10-Year Baseline Years: 2000 to 2009. 2. 5-Year Baseline Years: 2004 to 2008. 3. Minimum criterion for the Urban Water Use Target is defined as the 95 percent of the 5-year base daily per capita water use (0.95*244 gpcd). 4. Urban Water Use Target determined using Method 4. 5. Interim Urban Water Use Target defined as the average of the 10-year baseline per capita water use and Urban Water Use Target.								

DWR allows for agencies to modify their baseline water use and 2020 per capita water conservation targets as part of the 2015 round of UWMPs. Therefore, during the preparation of the 2015 UWMP, the City may revisit its baseline water use as well as the selected 2020 per capita water use target. At this time, consideration can be given to the benefits of any water use exemptions (e.g., industrial process water), as well as the potential for use of alternative target methods (e.g., Method 2, Method 3), as appropriate.

## 3.2 WATER DEMANDS

The UWMPA requires that the UWMP identify the quantity of water supplied to the agency's customers including a breakdown by user classification.

Law

*10631 (e) (1). Quantify, to the extent records are available, past and current water use, and projected water use (over the same five-year increments described in subdivision (a)), identifying the uses among water use sectors including, but not necessarily limited to, all of the- following uses: (A) Single-family residential; (B) Multifamily; (C) Commercial; (D) Industrial; (E) Institutional and governmental; (F) Landscape; (G) Sales to other agencies; (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof; and (I) Agricultural.*

*10631 (e) (2). The water use projections shall be in the same 5-year increments to 20 years or as far as data is available.*

*10631.1 (a). The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.*

### **3.2.1 Historical Water Use**

The City provides potable water service to its residential, commercial, landscape, and institutional customers within its service area. In 2010, the City produced 633 million gallons or 1,944 acre-feet (AF), which is equivalent to 1.7 million gallons per day (MGD) of water servicing a population of approximately 7,676. Table 3.6 lists the historical annual water production from 1995 to 2010.

Table 3.7 and Table 3.8 summarize the historical number of connections and associated annual water use by customer type for year 2005 and 2010, respectively. Figure 3.4 is a graphical representation of the current year 2010 distribution of user types and the distribution of water use.

### **3.2.2 Per Capita Consumption**

The per capita consumption rate, coupled with the population forecasts provided in Chapter 2, is used for estimating the City's future water requirements, evaluating the adequacy of the supply source, and determining storage needs.

From 1995 to 2010, the consumption rate in the City ranged between a low of 187 gpcd in 1998 and 1999 and a high of 256 gpcd in 2007. As noted in Section 3.1.1, the City's selected 10-year baseline water use was calculated to be 236 gpcd. Figure 3.5 illustrates the projected per capita water use reduction to meet the City's 2020 water use target.

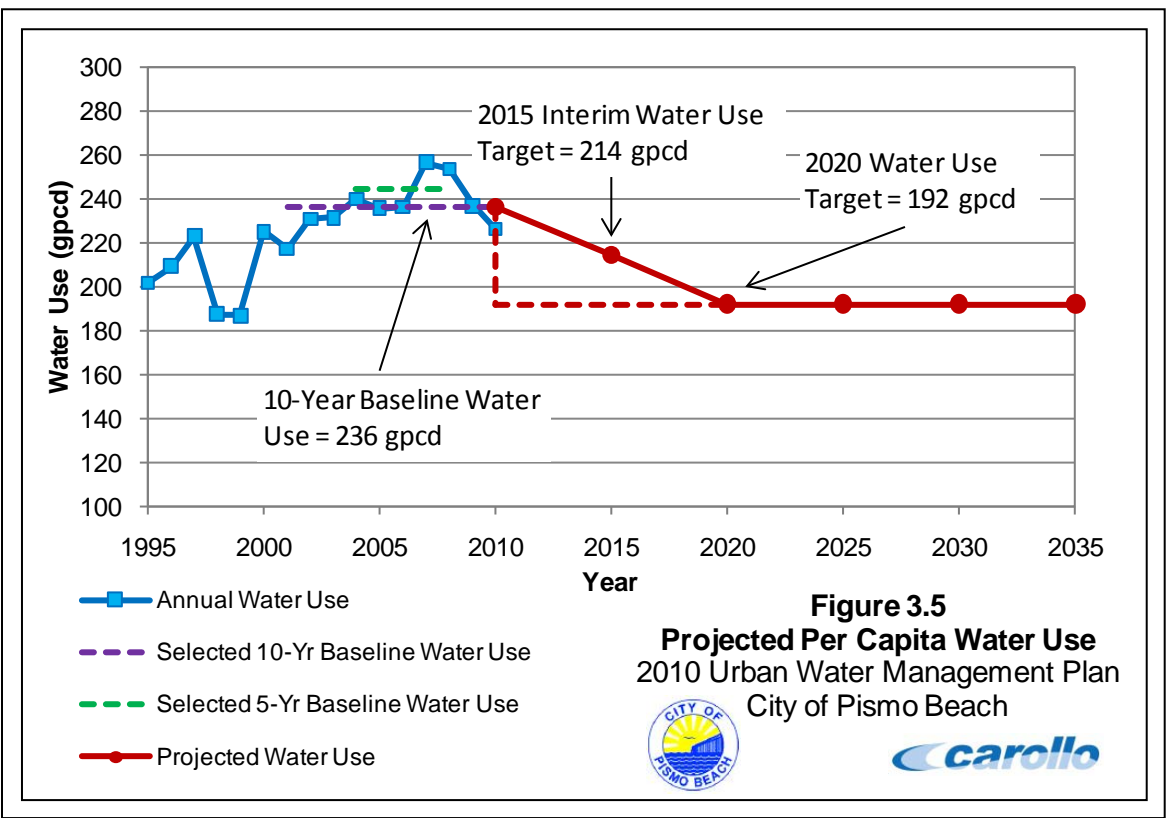
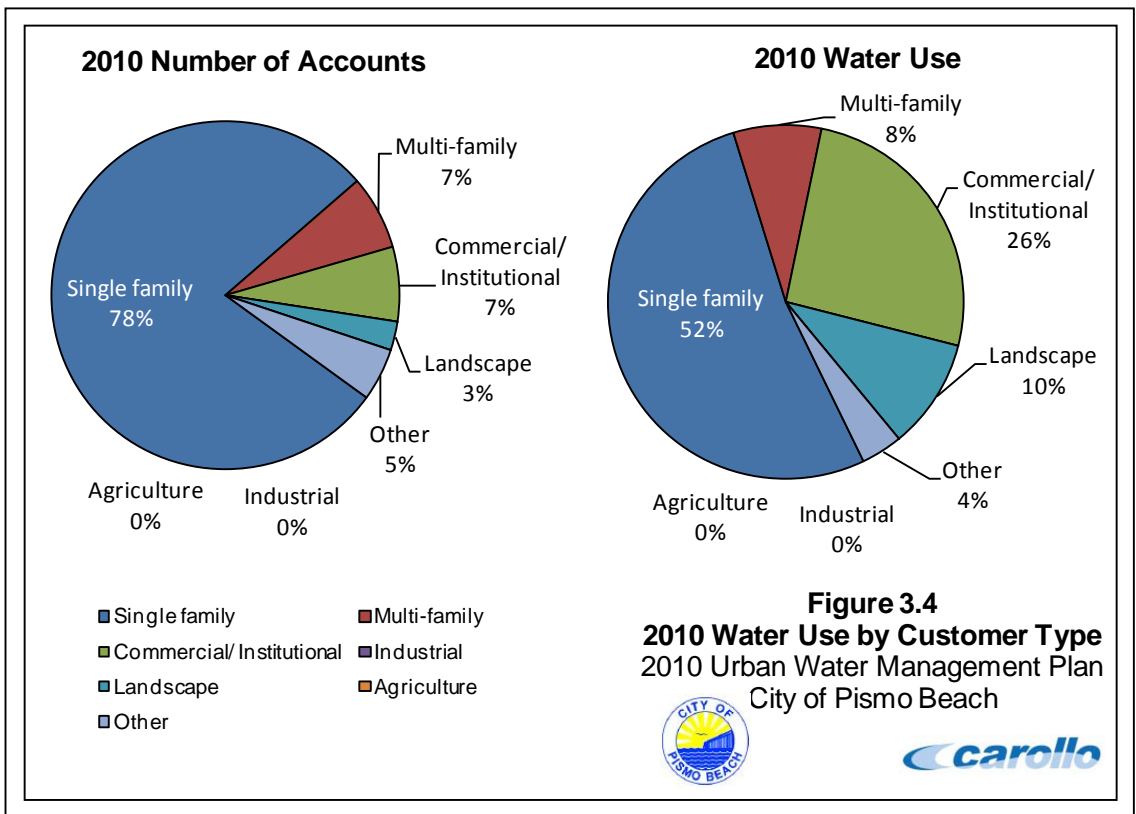
The City's per capita water use has remained relatively stable since 1995, with the exception of a decreased in consumption in 1998 and 1999, and a recent fluctuation since 2006. The historical data provided on the DWR Public Water System Statistics Sheets for the years 1998 and 1999 is questionable as reported metered deliveries for those years were higher than recorded production values. The cause of this discrepancy is unknown and therefore will not be discussed further.

The City has recently experienced a decrease in per capita consumption, dropping from 256 gpcd in 2007 to 226 gpcd in 2010. The recent reduction in per capita consumption is likely due to the conservation measures enacted by the City in an effort to reduce pumping from groundwater aquifers. These conservation activities were primarily in response to groundwater elevations that had dropped below mean sea level (MSL), posing a threat of seawater intrusion (described in more detail in Chapters 4 and 5 of this UWMP).

<b>Table 3.6      Historic Monthly Water Production (1995 - 2010)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>					
Year	Annual Water Production			Population	
	Total Annual (AFY) <sup>(1)</sup>	Total Annual (MG)	Average Daily (MGD)	Population <sup>(2)</sup>	Per Capita Consumption (gpcd)
1995	1,801	587	1.6	7,981	202
1996	1,901	620	1.7	8,093	209
1997	2,056	670	1.8	8,233	223
1998 <sup>(3)</sup>	1,740	567	1.6	8,285	187
1999 <sup>(3)</sup>	1,758	573	1.6	8,395	187
2000	2,156	702	1.9	8,537	225
2001	2,066	673	1.8	8,497	217
2002	2,191	714	2.0	8,479	231
2003	2,177	709	1.9	8,401	231
2004	2,245	732	2.0	8,333	240
2005	2,152	701	1.9	8,155	236
2006	2,119	690	1.9	8,010	236
2007	2,257	735	2.0	7,858	256
2008	2,208	719	2.0	7,761	253
2009	2,057	670	1.8	7,758	237
2010	1,944	633	1.7	7,676	226
<b>Notes:</b> 1. Source: DWR Public Water System Statistics Sheets 2. Source: California Department of Finance Population Estimates. 3. The historical recorded water production and delivery data for these years is questionable. The metered water deliveries for years 1998 and 1999 are greater than indicated production volumes.					

<b>Table 3.7 Water Deliveries – Actual, 2005 (Guidebook Table 3)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>					
Water Use Sectors	2005				
	Metered		Not Metered		Total Deliveries <sup>(2)</sup> (AFY)
	No. of Accounts <sup>(2)</sup>	Deliveries <sup>(2)</sup> (AFY)	No. of Accounts	Deliveries <sup>(2)</sup> (AFY)	
Single family	4,031	982	0	0	982
Multi-family	285	160	0	0	160
Commercial/Institutional	407	696	0	0	696
Industrial	0	0	0	0	0
Landscape	123	180	0	0	180
Agriculture	0	0	0	0	0
Other	69	108	0	0	108
<b>Total</b>	<b>4,915</b>	<b>2,126</b>	<b>0</b>	<b>0</b>	<b>2,126</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR. 2. Source: 2005 DWR Public Water System Statistics.					

<b>Table 3.8 Water Deliveries – Actual, 2010 (Guidebook Table 4)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>					
Water Use Sectors	2010				
	Metered		Not Metered		Total Deliveries <sup>(2)</sup> (AFY)
	No. of Accounts <sup>(2)</sup>	Deliveries <sup>(2)</sup> (AFY)	No. of Accounts	Deliveries <sup>(2)</sup> (AFY)	
Single family	3,699	856	0	0	856
Multi-family	323	131	0	0	131
Commercial/Institutional	326	420	0	0	420
Industrial	0	0	0	0	0
Landscape	126	164	0	0	164
Agriculture	0	0	0	0	0
Other	230	61	0	0	61
<b>Total</b>	<b>4,704</b>	<b>1,632</b>	<b>0</b>	<b>0</b>	<b>1,632</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR. 2. Source: 2010 DWR Public Water System Statistics.					

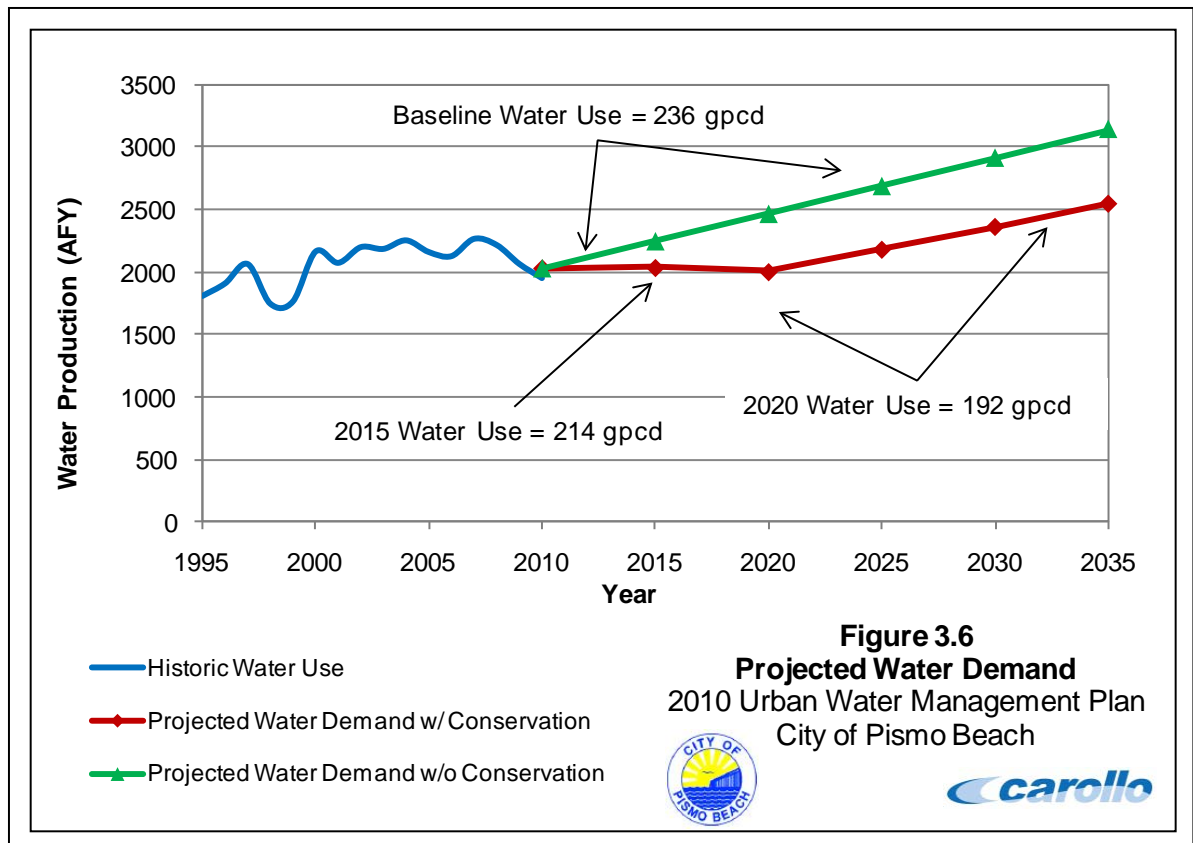


### 3.2.3 Water Demand Projections

Projected water demands were determined using the interim and target per capita consumption rates and the projected population of the City. The projected annual water per capita demands for year 2015 were developed by multiplying the projected 2015 population by the City's 2015 interim water use target (214 gpcd). The projected annual per capita water demands for year 2020 and beyond were developed by multiplying the projected population by the City's 2020 water use target (192 gpcd).

For comparison, Table 3.9 describes the projected water demands with and without the application of conservation targets. The projected water demand without conservation does not consider the 2015 or 2020 water use targets, and instead is determined from the selected 10-year baseline water use. As shown in Table 3.9, by meeting its target per capita water use, the City could reduce its year 2035 water use from 2.8 MGD (3,138 AFY) to 2.3 MGD (2,550 AFY). Figure 3.6 provides a graphical representation of the information presented in Table 3.9.

<b>Table 3.9 Conservation Demand Comparison 2010 Urban Water Management Plan City of Pismo Beach</b>					
Year	Distribution System Population <sup>(1)</sup>	Projected Water Use (mgd)			
		Target Demands <sup>(2)</sup>		Baseline Demands <sup>(3)</sup>	
		(MGD)	(AFY)	(MGD)	(AFY)
2015	8,484	1.8	2,036	2.0	2,246
2020	9,305	1.8	2,002	2.2	2,463
2025	10,140	1.9	2,182	2.4	2,684
2030	10,989	2.1	2,364	2.6	2,909
2035	11,854	2.3	2,550	2.8	3,138
<b>Notes:</b> 1. Distribution system population projections estimated from the City's Draft EIR for the Price Canyon Specific Plan. 2. Target demand projections are based on the City's per capita water use targets for 2015 and 2020. 3. Baseline demand projections are based on the City's selected 10-year baseline water use.					



The projected connections and water demands for each sector for years 2015 to 2035 are summarized in Table 3.10, Table 3.11, and Table 3.12. To project the number of connections per sector, it was assumed that the number of connections will grow proportionally with the projected water demands. These are based off the relative distribution of customer accounts and water use per customer sector seen in the 2010 metering year. Actual water use by customer sector will be dependent on the progression and trend of future development, and may be adjusted in future UWMPs as necessary.

The projected demands include potential water demand from the Price Canyon and Los Robles Del Mar (LRDM) development projects because they include the population increase expected as a result of development. Both Price Canyon and LRDM incorporate proposed land uses that are similar to those currently existing within the City, such as residences, a golf course, parks, and open space areas. Therefore, historical (2010) distributions of water use by customer sector are appropriate for application in determining future water use for the City (including Price Canyon and LRDM), because of the similarities in land use types and water uses to those proposed for Price Canyon and LRDM.

<b>Table 3.10 Water Deliveries – Projected, 2015 (Guidebook Table 5)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>					
<b>Water Use Sectors</b>	<b>2015</b>				
	<b>Metered</b>		<b>Not Metered</b>		<b>Total Deliveries (AFY)</b>
	<b>No. of Accounts</b>	<b>Deliveries (AFY)</b>	<b>No. of Accounts</b>	<b>Deliveries (AFY)</b>	
Single family	4,088	985	0	0	<b>985</b>
Multi-family	357	151	0	0	<b>151</b>
Commercial/Institutional	360	483	0	0	<b>483</b>
Industrial	0	0	0	0	<b>0</b>
Landscape	139	189	0	0	<b>189</b>
Agriculture	0	0	0	0	<b>0</b>
Other	254	71	0	0	<b>71</b>
<b>Total</b>	<b>5,199</b>	<b>1,878</b>	<b>0</b>	<b>0</b>	<b>1,878</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR.					

<b>Table 3.11 Water Deliveries – Projected, 2020 (Guidebook Table 6)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>					
<b>Water Use Sectors</b>	<b>2020</b>				
	<b>Metered</b>		<b>Not Metered</b>		<b>Total Deliveries (AFY)</b>
	<b>No. of Accounts</b>	<b>Deliveries (AFY)</b>	<b>No. of Accounts</b>	<b>Deliveries (AFY)</b>	
Single family	4,484	969	0	0	<b>969</b>
Multi-family	392	148	0	0	<b>148</b>
Commercial/Institutional	395	475	0	0	<b>475</b>
Industrial	0	0	0	0	<b>0</b>
Landscape	153	186	0	0	<b>186</b>
Agriculture	0	0	0	0	<b>0</b>
Other	279	70	0	0	<b>70</b>
<b>Total</b>	<b>5,702</b>	<b>1,848</b>	<b>0</b>	<b>0</b>	<b>1,848</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR.					

<b>Table 3.12 Water Deliveries – Projected 2025, 2030, 2035 (Guidebook Table 7) 2010 Urban Water Management Plan City of Pismo Beach</b>						
<b>Water Use Sectors</b>	<b>2025 Metered</b>		<b>2030 Metered</b>		<b>2035 Metered</b>	
	<b>No. of Accounts</b>	<b>Deliveries (AFY)</b>	<b>No. of Accounts</b>	<b>Deliveries (AFY)</b>	<b>No. of Accounts</b>	<b>Deliveries (AFY)</b>
Single family	4,886	1,056	5,296	1,144	5,712	1,234
Multi-family	427	162	462	175	499	189
Commercial/ Institutional	431	518	467	561	503	606
Industrial	0	0	0	0	0	0
Landscape	166	202	180	219	195	236
Agriculture	0	0	0	0	0	0
Other	304	76	329	82	355	89
<b>Total</b>	<b>6,214</b>	<b>2,013</b>	<b>6,735</b>	<b>2,182</b>	<b>7,264</b>	<b>2,354</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR.						

### **3.2.3.1 Sales to Other Agencies**

To date, the City has made no sales to other agencies, nor does the City anticipate any in the future (Table 3.13).

<b>Table 3.13 Sales to Other Water Agencies (Guidebook Table 9) 2010 Urban Water Management Plan City of Pismo Beach</b>							
<b>Agency</b>	<b>Water Use (AFY)</b>						
	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
None	0	0	0	0	0	0	0
<b>Total, AFY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR.							

### **3.2.3.2 Other Water Demands**

Additional water uses and losses in the City's service area are presented in Table 3.14. Projected system losses are based on the average percent estimated losses incurred in between 2001 and 2009, approximately 7.7 percent. Unaccounted-for (lost) water is calculated as the difference between yearly water production volumes and metered water deliveries. Water losses in 2010 were 16 percent of total water produced, and were not

used in determining average annual system losses. The high percent loss in 2010 is uncharacteristic of the City's distribution system. The City may consider a system audit to determine potential causes of the uncharacteristic losses.

<b>Table 3.14 Additional Water Uses and Losses (Guidebook Table 10)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>							
<b>Water Use<sup>(2)</sup></b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
Saline Barriers	0	0	0	0	0	0	0
Groundwater Recharge	0	0	0	0	0	0	0
Conjunctive Use	0	0	0	0	0	0	0
Raw Water	0	0	0	0	0	0	0
Recycled Water <sup>(3)</sup>	0	0	0	0	0	0	0
System Losses <sup>(4)</sup>	26	312	157	154	168	182	197
Other	0	0	0	0	0	0	0
<b>Total, AFY</b>	<b>26</b>	<b>312</b>	<b>157</b>	<b>154</b>	<b>168</b>	<b>182</b>	<b>197</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR. 2. Any water accounted for in Guidebook Tables 3 through 7 are not included in this table. 3. Potential uses of recycled water are included in Guidebook Tables 3 through 7. No additional recycled water uses are considered in this table. 4. System losses are based on the average percentage losses between 2001 and 2009.							

### **3.2.3.3 Total Water Demand Projections**

The City's total average annual demands are presented in Table 3.15. The projected uses are technically and economically feasible for implementation by the City. Residential, commercial, institutional, agricultural, and landscape uses are all within the scope of the City's General Plan Update. As increased water demands are encountered, the City will develop the technical and economic plans necessary to maintain reasonable projected water demands.

<b>Table 3.15    Total Water Use (Guidebook Table 11) 2010 Urban Water Management Plan City of Pismo Beach</b>							
Water Use	Water Use (AFY)						
	2005	2010	2015	2020	2025	2030	2035
Total water deliveries	2,126	1,632	1,878	1,848	2,013	2,182	2,354
Sales to other water agencies	0	0	0	0	0	0	0
Additional water uses and losses	26	312	157	154	168	182	197
<b>Total, AFY</b>	<b>2,152</b>	<b>1,944</b>	<b>2,036</b>	<b>2,002</b>	<b>2,182</b>	<b>2,364</b>	<b>2,550</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR.							

### 3.2.4 Wholesale Water Demand Projections

The UWMPA requires retail water agencies that receive wholesale water to report the projected water demand data that was sent to each wholesale agency from which it receives water.

#### Law

*10631 (k). Urban water suppliers that rely upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).*

The City receives wholesale water from two sources: (1) the Lopez Project, managed by the San Luis Obispo County Flood Control and Water Conservation District (District), and (2) the State Water Project, managed by San Luis Obispo County. The available supply from these sources is discussed in Chapter 4 of this UWMP. Due to the City's projected growth, increased demand from the Price Canyon and LRDM developments, and increasing reliance on surface water in lieu of groundwater, the City expects to request its full allocations to meet projected demands of its water users. Therefore, the projected wholesale water demands in Table 3.16 are equivalent to the projected available supplies described in Chapter 4.

<b>Table 3.16    Retail Agency Demand Projections Provided to Wholesale Suppliers (Guidebook Table 12) 2010 Urban Water Management Plan City of Pismo Beach</b>							
Wholesaler	Contracted Volume (AFY)	Water Use (AFY)					
		2010 <sup>(2)</sup>	2015	2020	2025	2030	2035
Lopez Project	896	842	896	896	896	896	896
State Water Project	1,240	1,006	1,740	1,740	1,740	1,740	1,740
<b>Total</b>	<b>2,136</b>	<b>1,848</b>	<b>2,636</b>	<b>2,636</b>	<b>2,636</b>	<b>2,636</b>	<b>2,636</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR. 2. Wholesale demands from 2010 represent actual deliveries made to the City from respective sources. Sources of this information include (1) DWR Public Water System Statistics Sheet and (2) County Flood Control and Water Conservation District (Zone 3) 2010 Urban Water Management Plan Update.							

### 3.2.5 Lower Income Water Demand Projections

Section 10631.1 (a) of the California Water Code requires that retail urban water suppliers include projected water use for lower income single family and multifamily households. Section 50079.5 of the Health and Safety Code defines lower income households as 80 percent of the median income, adjusted for family size.

Table 3.17 projects water demands associated with lower income water users through year 2035. These estimates were generated based on the 2010 Update of the City of Pismo Beach Housing Element, which includes lower income household information for the City and is the best estimate of lower income water use at this point. The lower income demand projections presented in Table 3.17 are included in the total water use projections provided in Table 3.10 through Table 3.12.

<b>Table 3.17    Low Income Projected Water Demands (Guidebook Table 8) 2010 Urban Water Management Plan City of Pismo Beach</b>					
Low Income Water Demands	Water Use (AFY) <sup>(2)</sup>				
	2015	2020	2025	2030	2035
Single Family Residential	435	427	466	505	544
Multi-Family Residential	67	65	71	77	83
<b>Total, AFY</b>	<b>501</b>	<b>493</b>	<b>537</b>	<b>582</b>	<b>628</b>

<b>Table 3.17 Low Income Projected Water Demands (Guidebook Table 8) 2010 Urban Water Management Plan City of Pismo Beach</b>					
<b>Low Income Water Demands</b>	<b>Water Use (AFY)<sup>(2)</sup></b>				
	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
Single Family Residential	435	427	466	505	544
Multi-Family Residential	67	65	71	77	83
<b>Total, AFY</b>	<b>501</b>	<b>493</b>	<b>537</b>	<b>582</b>	<b>628</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare of 2010 Urban Water Management Plan" by DWR. 2. Projected values are based on the percentage of low income households out of all households in the City (44 percent), and therefore represent 44 percent of the total projected residential water demands.					

### 3.3 WATER USE REDUCTION PLAN

The UWMPA requires that retail water agencies develop an implementation plan for compliance with the SBx7-7 water use targets.

Law

*10608.36. Urban wholesale water suppliers shall include in the urban water management plan... an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part.*

*10608.26. Urban retail water suppliers are to prepare a plan for implementing the Water Conservation Bill of 2009 requirements and conduct a public meeting which includes consideration of economic impacts.*

This City is committed to taking appropriate steps to reduce its water consumption to meet its interim 2015 per capita water use target of 214 gpcd, and its 2020 target of 192 gpcd. In fact, conservation measures enacted by the City have already caused a 12 percent decrease in per capita consumption between 2007 and 2010. As the City continues to implement water conservation measures and encourage water conservation practices within its customer base, the City will likely be able to meet its 2020 per capita water use target of 192 gpcd.

#### 3.3.1 Water Conservation Measures

The City's commitment to water use reduction is facilitated by its membership with the California Urban Water Conservation Council (CUWCC). Primary methods of the City's water reduction plans are included in the discussion of Demand Management Measures (discussed in Chapter 6 of this UWMP). In particular, the City has already established the following programs to reduce overall water use:

- In 2009, the City passed a water conservation municipal ordinance to establish expectations for responsible water use prohibitions for wasteful water use.
- In the late 1980s and early 1990s, the City Council adopted several resolutions and ordinances that required retrofitting with water-conserving fixtures in order to obtain a building permit. This has resulted in a majority of the City's households (approximately 90 percent) containing updated fixtures that use less water for operation. In addition, the City's relatively high percentage of annual residential upgrades indicate that older, water-consuming fixtures are continually being replaced with modern, water-conserving fixtures.
- The City's current building codes and permit approval process require the installation of water-conserving fixtures in lieu of water-wasting fixtures.
- All of the service connections in the City are metered, allowing the City to maintain detailed records of water deliveries and subsequent unaccounted-for water. This type of audit method allows the City to maintain system losses averaging less than 8 percent.
- For most of its residential customers, the City's water rate billing structure is based on volume of water use. This rate structure inherently promotes water conservation through financial incentives.
- In 1992, the City passed a municipal ordinance that dictated mandatory water-efficient landscape standards and requirements. In addition, developers who propose landscaping in their plans must submit a landscape documentation package to the City for approval as a part of their application for a development project. The City then has the opportunity to review the landscape documentation package to ensure that the projects are carried out using water conservation measures.
- The City provides educational information on water conservation in the form of pamphlet bill stuffers and when requested by customers.

The City has included in its budget a \$6,500 allocation for water conservation coordination and related activities. Therefore, the City will be able to continually develop its water conservation programs and implement conservation measures to reduce impacts on surface and groundwater resources. In particular, the City intends to incorporate water conservation measures throughout implementation of the Price Canyon and LRDM development project. Doing so will facilitate the responsible and sustainable use of water resources for the City through the future planning period.

The aforementioned water conservation efforts of the City have successfully reduced per capita water consumption. Reduction in water use is evident by the City's decrease in per capita use from a high of 256 gpcd in 2007 to its 2010 value of 226 gpcd (almost a 12 percent reduction). The City will continue to implement demand reduction measures until the 2020 target is reached.

Because the Water Conservation Bill of 2009 requires that interim and final water use targets be reached by 2015 and 2020, respectively, the City intends to implement its water use reduction measures over the course of the next 5 to 10 years. The City will implement additional measures as necessary to maintain conservation goals.

### **3.3.2 Recycled Water**

In addition to encouraging water conservation practices and implementing conservation measures, the City is particularly motivated to reduce potable water consumption by implementing an extensive recycled water program. Motivated primarily by the water planning efforts of the Price Canyon development, the City recognizes the importance of utilizing recycled water as a valuable resource that will help ensure adequate water supply over the short- and long-term planning period. The City's planned investment in a recycled water program represents the City's commitment to sustainable and responsible water resources planning.

Since the City intends to apply recycled water use to follow the Price Canyon Specific Plan (Specific Plan) implementation, the City may begin regional planning efforts regarding recycled water within the next five years. According to the Specific Plan, recycled water use to offset State Water used for landscape irrigation and groundwater used for irrigation is a key component of the development in Price Canyon. Therefore, progress on implementation of the Specific Plan must coincide with availability of recycled water supplies to the Planning Area.

The City has already completed several preliminary studies regarding recycled water opportunities (described in Chapter 4). With these opportunities identified, the City will continue to manage its recycled water planning efforts alongside Specific Plan development. Additional facility planning documents will need to be prepared to fully understand the extent to which the City's recycled water program may be utilized. Nonetheless, the City is committed to employ recycled water as a beneficial resource to protect and reduce consumption of its potable water resources.

### **3.3.3 Economic Impacts**

The current and future water conservation efforts of the City do not place a disproportionate economic burden on specific customer types. For single- and multi-family residences (comprising 60 percent of the 2010 water use), programs are either in place or are being developed by the City to encourage residents to decrease water use by replacing inefficient fixtures and through education. All of the City's water use sectors are subject to municipal code that requires water conservation actions and prohibits wasteful water practices.

## SYSTEM SUPPLIES

The Urban Water Management Planning Act (UWMPA) requires that the Urban Water Management Plan (UWMP) include a description of the agency's existing and future water supply sources for the next 20 years. The description of water supplies must include detailed information on the groundwater basin such as water rights, determination if the basin is in overdraft, adjudication decree, and other information from the groundwater management plan.

### Law

*10631. A plan shall be adopted in accordance with this chapter and shall do all of the following:*

*10631 (b). Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a) [to 20 years or as far as data is available]. If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:*

*10631 (b) (1). (Provide a) copy of any groundwater management plan adopted by the urban water supplier...*

*10631 (b) (2). (Provide a) description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For those basins for which a court or board has adjudicated the rights to pump groundwater, (provide) a copy of the order or decree adopted by the court or by the board... (Provide) a description of the amount of groundwater the urban water supplier has the legal right to pump under the decree... For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.*

*10631 (b) (3). (Provide a) detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic records.*

*10631 (b) (4). (Provide a) detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonable available, including, but not limited to, historic use records.*

## 4.1 WATER SUPPLY SOURCES

This section describes the existing and projected water supply sources for the City.

The City currently receives water from three sources: Lopez Lake, the State Water Project (SWP), and groundwater. Municipal water supply sources for the Price Canyon development project are anticipated to include State Water and recycled water (to offset

potable water used for residential and agricultural irrigation). Agricultural water supply for Price Canyon is anticipated to be a combination of groundwater and recycled water. A description of the City's planning efforts for recycled water are included in Section 4.6 of this UWMP.

#### 4.1.1 Water Supply Facilities

The City's groundwater is pumped from two wells located in Grover Beach. Table 4.1 describes the existing well supply capacity of the two groundwater wells currently in use by the City.

<b>Table 4.1 Existing Groundwater Wells 2010 Urban Water Management Plan City of Pismo Beach</b>				
<b>Well Number</b>	<b>Location</b>	<b>Year Installed</b>	<b>Casing Depth (feet)</b>	<b>Production Capacity (GPM)</b>
5	8th Street and Grand Avenue	1973	500	600
23	900 Block of Huber Street	1990	395	950
<b>Total (GPM)</b>				<b>1,550</b>
<b>Total (AFY)</b>				<b>2,502</b>
<b>Notes:</b> 1. Table adapted from Table 5-1 in the City of Pismo Beach's Water Master Plan (2004).				

The City's total groundwater supply capacity is 1,550 gallons per minute (GPM; 2,502 acre-feet per year [AFY]). Therefore, the firm capacity, which is defined as the supply capacity with the largest well out of service, is 600 GPM (968 AFY).

The City's other municipal supply sources (surface water from Lopez Lake and the SWP) utilize facilities that are not managed by the City, but by the County of San Luis Obispo (County). Specifically, the County of San Luis Obispo Flood Control and Water Conservation District (Zone 3; hereafter SLOFCWCD) manages the Lopez Reservoir and surface water allocation to coastal communities, including the City. The County also manages the SWP contract through which the City receives its State Water allocation.

#### 4.1.2 Distribution System and Storage

The City's current water distribution system consists of 11 pressure zones within seven distribution zones, storage reservoirs, pumping stations, and over 50 miles of distribution mains.

The City's distribution zones accommodate customers located across over seven miles of coastline, with elevations ranging from sea level to over 600 feet above mean sea level

supply source and reservoir, if applicable. The City's water supply distribution system is rather complex, and is described in more detail in the City's Water Master Plan (2004).

<b>Table 4.2      Distribution Zone Summary 2010 Urban Water Management Plan City of Pismo Beach</b>				
Distribution Zone	Supply		Reservoir	
	From	Booster Station	Name	Size (gallons)
Bello	Bello Turnout	---	Charles Street	420,000
	Well #5		Bello Street	470,000
	Well #23			
	Pismo Oaks Turnout			
Pismo Oaks	Bello Distribution	Pismo Oaks	Pismo Oaks	800,000
Pacific Estates	Bello Distribution	Pacific Estates	Pacific Estates 1	350,000
			Pacific Estates 2	850,000
Heights 2	Bello Distribution	Bello Street	Heights 2	220,000
Heights 3	Heights 2 Distribution	Heights 2	Heights 3	100,000
	Heights 3 Distribution	Heights 3	Hydro-pneumatic Tank	3,000
Shell Beach 1	Bello Distribution Vista Del Mar Turnout	Bay Street	Shell Beach 1	1,000,000
Shell Beach 2	Shell Beach 1 Distribution Sunset Palisades Turnout (N/C)	Shell Beach	Shell Beach 2	1,000,000
<b>Notes:</b> 1. Table adapted from Table 3-1 in the City's Water Master Plan (2004).				

### 4.1.3 Current and Projected Water Sources

The City's current and projected water supply sources are summarized in Table 4.3. The City water supply sources include local groundwater, the Lopez Project, and the SWP.

#### 4.1.3.1 Groundwater

The City currently extracts groundwater from the Arroyo Grande Plain of the Tri-Cities Mesa Subbasin (Subbasin) of the Santa Maria Valley Groundwater Basin (Basin). In 1983, the City entered into an informal "gentlemen's" agreement with three other entities: The cities of

Arroyo Grande and Grover Beach, and the Oceano Community Services District. The purpose of this agreement was to limit extraction from the Basin. The groundwater allocations assigned to each entity are based on a 1979 Groundwater Study performed by DWR and relative participation in the Lopez Project (additional surface water supply). The City of Pismo Beach is allocated 700 AFY of groundwater from the Subbasin.

Groundwater is intended only for agricultural use in the Price Canyon Planning Area (Planning Area) from privately-owned wells, and is not intended for use in the Los Robles Del Mar (LRDM) annexation area. As such, private groundwater use is not under the City's jurisdiction, nor is covered under the Gentlemen's Agreement. Since the City is not considering use of groundwater supplies for municipal use in the Planning Area, the groundwater resources in Price Canyon or LRDM annexation area will not be discussed.

#### **4.1.3.2 Lopez Project**

The Lopez Project is managed by the SLOFCWCD. The reservoir's total capacity is 51,990 acre-feet (AF), though the normal annual inflow is approximately 10,730 AF. Two thousand AF of the inflow amount is lost to evaporation, 4,530 AF is contracted for distribution, and any remaining excess is untreated and released to the Arroyo Grande Creek. The Lopez Project currently provides a contractual supply of up to 896 AFY to the City. A surplus supply from the reservoir has been available for purchase in the past, but is not consistently available from year to year.

#### **4.1.3.3 State Water Project**

The SWP, operated by the DWR, provides treated surface water to the region through the Coastal Branch of the aqueduct at the Lopez turnout. The County is a primary contractor of the SWP, and serves as the entity through which the City receives its State Water allocation. The Central Coast Water Authority (CCWA) treats and distributes the water directly to contracted retailers, such as the City. The City's current entitlement of State Water is 1,240 AFY, of which 40 AFY is allocated to the Brad Wilde Pismo 98 LLC (Preserve Property). Therefore, the current supply available to the City from the SWP is 1,200 AFY, which is intended to serve the populations within the current City limits and the LRDM annexation area.

The City will have an opportunity to secure drought buffer and additional State Water allocation for the City's current population and planned expansion projects. This opportunity comes from the County of San Luis Obispo, which is currently preparing a Water Master Plan. After adoption of the County's Water Master Plan, the County intends to divest itself of the excess State Water that is currently unallocated (of the County's total 25,000 AF entitlement).

In addition, the County operates a drought buffer program whereby agencies participating in the SWP through the District can "buy in" to emergency State Water allocations for an annual fee. Drought buffer water is water that has no pipeline capacity for delivery. Rather,

it is used to increase deliveries during time of drought when available supplies are reduced. For example, during the 2009 drought period when 40 percent of contracted amounts were anticipated, without a drought buffer the City would receive 496 AF of water, and with a drought buffer of 1,240 AF the City would receive 992 AF.<sup>2</sup>

On October 6, 2009, the Pismo Beach City Council approved the acquisition of an additional 1,240 AF of State Water as an ongoing drought buffer for current State Water supplies and directed City staff to request additional planning allocations from the County. Included in the requested planning allocation is 1,000 AF of drought buffer for potential reductions in Lopez Project deliveries or possible short-term pumping reductions from groundwater. Additionally, the City has requested from the County a planning allocation of 500 AF of additional State Water supplies and 500 AF of drought buffer to accommodate growth within the Sphere of Influence (SOI) areas.<sup>3</sup>

Therefore, the City has requested a total of 2,740 AF to serve as a drought buffer, and 500 AF to serve as additional deliverable supply to the Price Canyon SOI, Planning Area, and LRDM annexation. These values are in addition to the City's current deliverable entitlement of 1,240 AFY. The additional 500 AF of deliverable supply to the Price Canyon Planning Area and LRDM annexation may be available by 2015, depending upon allocation approvals from the District.

Table 4.3 describes the current and projected water supplies available to the City. Additional information about the City's water supply sources, drought buffer requests, and additional water supply requests for its SOI can be found in the Pismo Beach Council Agenda Report in Appendix G. Table 4.3 includes the potential supply of recycled water that may be available to the City as early as 2015, which constitutes the City's entire projected wastewater flow. While the City does not currently have the treatment abilities or conveyance system to create or distribute recycled, the City is pursuing implementation of a wastewater treatment plant (WWTP) upgrade and installation of a recycled water distribution system. Recycled water is anticipated to be used extensively for agricultural use and some residential and commercial irrigation in the Price Canyon Planning Area. More information on the City's recycled water plans is included in Section 4.6.

#### **4.1.4 Wholesale Supplies**

As indicated on Table 4.4, the City plans to receive wholesale water from the Lopez Project and the SWP. The City has requested an additional allocation of 500 AFY for the proposed Price Canyon development project. This allotment may be available by 2015, depending on County approval.

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<sup>2</sup> Source: City of Pismo Beach. (Oct 2009). City Council Agenda Report.

<sup>3</sup> Source: City of Pismo Beach. (Sept 2010). Draft Environmental Impact Report on Price Canyon Planning Area, General Plan Update, SOI Change, Annexation and Specific Plan.

<b>Table 4.3      Water Supplies - Current and Projected (Guidebook Table 16)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>							
<b>Water Supply Sources</b>		<b>Projected Water Supply (AFY)</b>					
<b>Water purchased from:</b>	<b>Wholesale Supplied Volume</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
Lopez Reservoir	Yes	896	896	896	896	896	896
State Water Project (Secured) <sup>(2)</sup>	Yes	1,240	1,240	1,240	1,240	1,240	1,240
State Water Project (Requested) <sup>(3)</sup>	Yes	0	500	500	500	500	500
Supplier-produced groundwater <sup>(4)</sup>	No	700	700	700	700	700	700
Supplier-produced surface water	No	0	0	0	0	0	0
Transfers In	No	0	0	0	0	0	0
Exchanges In	No	0	0	0	0	0	0
Recycled Water	No	0	1,421	1,558	1,698	1,840	1,985
Desalinated Water	No	0	0	0	0	0	0
<b>Total</b>		<b>2,836</b>	<b>4,757</b>	<b>4,894</b>	<b>5,034</b>	<b>5,176</b>	<b>5,321</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. This portion of State Water Project (SWP) supply has already been secured by the City. It includes a 40 AF allotment owned by Pismo 98, LLC (Preserve Property). A portion of this 40 AF allotment is available for City use only if there is excess water not used by the Preserve Property. Otherwise, the City's available SWP entitlement is 1,200 AFY. 3. This portion of SWP allocation, meant to serve the Price Canyon development, is listed separately from the City's current allocation because it has not yet been secured by contract. 4. Groundwater supplies include the 700 AFY allocation from the Tri-Cities Mesa Subbasin.							

<b>Table 4.4      Wholesale Supplies – Existing and Planned Sources of Water (Guidebook Table 17) 2010 Urban Water Management Plan City of Pismo Beach</b>						
Wholesale Sources	Contracted Volume <sup>(2)</sup> (AFY)	Projected Water Supply (AFY)				
		2015	2020	2025	2030	2035
Lopez Project	896	896	896	896	896	896
State Water Project	1,240	1,740	1,740	1,740	1,740	1,740
<b>Total</b>	<b>2,136</b>	<b>2,636</b>	<b>2,636</b>	<b>2,636</b>	<b>2,636</b>	<b>2,636</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. Contracted volume as of 2010.						

In the event of an emergency or need for stand-by water, the City has the opportunity to purchase water allocations from the SLOFCWCD through its State Water contract of the SWP. As a State Water contractor, the SLOFCWCD may sell a portion of its excess SWP allocation to the City. Other entities in San Luis Obispo and Santa Barbara Counties are also contractors of the Coastal Branch of the SWP. Therefore, the possibility exists for the City to purchase water from other State Water contractors in the area as well.

## 4.2 GROUNDWATER BASIN

This section describes the Santa Maria Valley Groundwater Basin (Basin) and applicable subbasins that underlie the City, and which are directly affected by the City's groundwater use.

### 4.2.1 Groundwater Basin Description

For planning purposes, the Department of Water Resources (DWR) has subdivided the State of California into ten separate hydrologic regions, corresponding to the State's major drainage basins. The Basin (Number 3-12 as described in DWR Bulletin 118) underlies the Santa Maria Valley in the coastal portion of northern Santa Barbara and southern San Luis Obispo Counties. The Basin also underlies Nipomo and Tri-Cities Mesas, Arroyo Grande Plain, and Arroyo Grande and Pismo Creek Valleys, of which the City draws from the Tri-Cities Mesa portion of the Basin. The Basin is bounded by the San Luis and Santa Lucia Ranges on the north, the San Rafael Mountains on the east, and Solomon Hills and San Antonio Creek Valley Groundwater Basin on the south, and the Pacific Ocean on the west. The Basin is approximately 288 square miles (184,000 acres). This basin was adjudicated in 2008.

Groundwater is found in alluvium, sand dunes, and the Orcutt, Paso Robles, Pismo, and Careaga formations. Groundwater is unconfined throughout most of the Basin except in the coastal portion where it is confined. Specific yield of sediments in the Basin ranges from 3 to 21 percent, with a mean specific yield of approximately 12 percent for parts of the Basin in San Luis Obispo County. DWR estimated the safe yield of the Tri-Cities Mesa – Arroyo Grande Plain Hydrologic subarea to be between 4,000 AFY and 5,600 AFY.

Natural recharge in the basin comes from seepage losses from major streams, percolation of rainfall, and subsurface flow. Percolation of flow in Pismo Creek provides recharge for the northern portion of the Basin. Percolation of flow in Arroyo Grande Creek, controlled by releases from Lopez Dam, provides recharge for the Tri-Cities Mesa, Arroyo Grande Plain, and Arroyo Grande Valley portions of the Basin. Incidental recharge results from deep percolation of urban and agricultural return water, treated wastewater return, and septic tank effluent. Some subsurface flow comes from consolidated rocks surrounding the Basin and from the neighboring San Antonia Creek Valley Groundwater Basin. A 2007 Water Balance Study of the Northern Cities Management Area (described below) estimated a total average annual recharge of 8,535 AFY, and an average annual groundwater production of 5,569 AFY between 1986 and 2004.

According to DWR Bulletin 118, the total storage capacity of the portion of the Basin in San Luis Obispo County is estimated to be approximately 4,000,000 AF, with about 784,000 AF of the total capacity residing above MSL. A 1968 storage capacity evaluation estimated that the total storage capacity of the Basin to be approximately 14,900,000 AF. Groundwater in storage for the San Luis Obispo County portion of the Basin was estimated to be 3,870,000 AF by DWR in 1969. According to a DWR 2002 estimate, groundwater in storage in the County portion of the Basin is estimated to have been 3,411,100 AF in 1985 and 3,399,700 AF in 1995. Groundwater storage above MSL was estimated to have been 231,100 AF in 1985 and 219,700 AF in 1995.<sup>4</sup>

A map of the Basin is included in Appendix H.

#### **4.2.2 Groundwater Management Plan**

A groundwater management plan has not been prepared for the City, Tri-Cities area, or the County. In the future, the City may consider coordination with other agencies within the Basin to develop a more comprehensive groundwater management plan. The City's underlying groundwater basin is adjudicated, so allowable withdrawals from the Basin are limited by law.

The City participates in a Northern Cities Monitoring Program, which is comprised of local entities that have a vested interest in responsibly managing the surface and groundwater resources of the region. The goal of the Northern Cities Monitoring Program is to help preserve the long-term integrity of water supplies in the Northern Cities Management Area

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<sup>4</sup> Source: DWR Bulletin 118 (2004 Update).

(NCMA). The program includes joint efforts from the City of Arroyo Grande, City of Grover Beach, City of Pismo Beach, Oceano Community Services District (collectively, the Northern Cities), County of San Luis Obispo, the SLOFCWCD, and local landowners.

The Northern Cities and partnered agencies have established six objectives for ongoing NCMA groundwater management, including:

- Share groundwater resources and manage pumping,
- Monitor supply and demand, and share information,
- Manage groundwater levels and prevent seawater intrusion,
- Protect groundwater quality,
- Manage cooperatively,
- Encourage water conservation.

The monitoring program collects and analyzes data pertaining to the water supply and demand of the region, including land and water uses in the Basin, supply sources, and groundwater conditions.

### **4.2.3 Groundwater Levels and Historical Trends**

The Northern Cities conduct groundwater monitoring in the NCMA, which represents the northernmost portion of the Santa Maria Valley Basin. The NCMA groundwater monitoring program utilizes collected data from three primary sources: (1) groundwater elevation data from San Luis Obispo County, (2) water quality and elevation data from a network of sentry wells in the NCMA, and (3) water quality data from the California Department of Public Health (DPH). Selected figures from the NCMA 2010 Annual Monitoring Report are included in Appendix H for reference, including a boundary map of the NCMA, historic annual precipitation, groundwater elevation contours, historic rainfall, and selected hydrographs of NCMA monitoring wells.

Groundwater elevations for the October 2010 Northern Cities monitoring event show elevations between 0 and 20 feet within the NCMA area. Elevations were highest in the eastern portion of the NCMA near Arroyo Grande and Highway 101. Groundwater elevations were above MSL throughout the NCMA during the October monitoring event except in the immediate area of pumping wells in the lower Arroyo Grande creek area. Significantly, water elevations were approximately five feet above MSL along the shoreline. This represents increased values from October 2009 and a significant recovery of elevations as compared to October 2008, when groundwater elevations in the north-central portion of the NCMA were below MSL.

In 2008, the lowest measured groundwater elevation was approximately ten feet below MSL. As described in the Northern Cities 2008 Annual Report, groundwater below MSL indicates a potential for seawater intrusion into fresh groundwater supplies. The area with

lowest groundwater elevations encompasses municipal well fields, and represents a relatively broad and shallow pumping trough exacerbated by drought conditions. Though the pumping trough persists in the north-central portion on the NCMA where the municipal wells fields are located, other measured groundwater elevations have recovered to above sea level conditions, decreasing the risk for seawater intrusion.

Hydrographs produced through the monitoring program indicate that groundwater elevations have historically varied above and below about 20 feet above MSL. Most of the hydrographs show that groundwater elevations have recovered to levels similar to 2006 (a wet water year). This groundwater level decrease and recovery cycles illustrate the relationship between times of the drought and increased pumping, and times of recovery with increased rainfall and decreased pumping.

In the area of active municipal well fields, hydrographs show that groundwater elevations have generally been above MSL. Elevation contours and hydrographs from NCMA's Annual Monitoring Reports from 2009 and 2010 are included in Appendix I. A depression in groundwater levels persists in the area of the trough. According to the Northern Cities 2010 annual report, this suggests that recharge and withdrawals are near balance in the area. Overall, groundwater elevations in the NCMA rose by several feet between 2008 and 2010, and in most locations are expected to continue to rise in response to recent wet water years.

DWR Bulletin 188 provides a historical account of groundwater elevations in the Basin. According to DWR, hydrographs show that water levels near the Tri-Cities Mesa generally remained stable in the Paso Robles Formation and the alluvium from about 1965 through 2000. Groundwater levels in the deeper Squire Member of the Pismo Formation near Tri-Cities Mesa declined during the 1980s and partially recovered by 2000 to about 4 to 11 feet below late 1970s/early 1980s levels. In addition, groundwater flow is generally westward toward the Pacific Ocean.

#### **4.2.4 Groundwater Overdraft**

Overdraft is the condition of a groundwater basin in which the amount of water withdrawn by pumping exceeds the amount of water that recharges the basin. By definition, overdraft is not a measure of annual fluctuations in groundwater storage volume. Rather, overdraft is a measure of the long-term trend associated with annual fluctuations. Overdraft is characterized by groundwater levels that decline over a period of years and never fully recover, even in wet years.<sup>5</sup>

DWR has identified the Central Coast Hydrologic Region to be in a state of overdraft. However, DWR also states that overdraft in this region is expected to decline as supply sources shift from groundwater to imported SWP surface water.<sup>6</sup> A primary concern for the

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<sup>5</sup> Source: DWR Bulletin 118 (2004 Update).

<sup>6</sup> Source: DWR California Water Plan Update, Bulletin 160-98.

City and for the Basin in general is saltwater intrusion from the coastal zone into fresh groundwater supply.

Recent low groundwater elevations have sparked an aggressive campaign from the City and its NCMA partners to reduce groundwater pumping, increase groundwater elevations, and prevent seawater intrusion. In fact, the City of Pismo Beach has decreased groundwater pumping by 86 percent between 2005 and 2010 by increasing reliance on surface water in lieu of groundwater. In addition, above-average precipitation and decreased groundwater withdrawal in 2010 have resulted in increased water levels and an apparent decrease in the water table depression in the pumping trough (municipal well field area).

The Northern Cities have already taken measures to avoid seawater intrusion and to protect groundwater supplies. Included in the Northern Cities response plan is continued groundwater monitoring, reduced coastal groundwater pumping, water conservation, and increased use of surface water supplies.<sup>7</sup>

#### **4.3 EXISTING AND PROJECTED GROUNDWATER PUMPING**

This section quantifies the historical and projected groundwater pumping by the City (Table 4.5 and Table 4.6). The 2008 Annual Monitoring Report for the NCMA indicated that drought conditions and subsequent increased groundwater pumping were causing groundwater elevations to drop below MSL, increasing the risk for and potentially causing seawater intrusion into groundwater aquifers. Since 2008, the City and surrounding municipalities that also rely on groundwater began an aggressive water monitoring and conservation campaign to identify the extent of seawater intrusion and limit its progress. In addition, the City intentionally shifted its potable water reliance more heavily on surface water to alleviate stress on groundwater supply. As a result of these groundwater conservation activities, the City was able to decrease its total groundwater pumping to 96 AFY, a decrease of 86 percent since 2006.

Projected groundwater pumping includes groundwater pumped to serve the population within the current City limits, as well as the additional demand from customers within the City's SOI that are a part of the City's water system. Groundwater projections do not include groundwater used in the Price Canyon Planning Area or the LRDM developments, since no groundwater is proposed for municipal use in those areas. The projected volumes in Table 4.6 assume that groundwater use within the Subbasin will be within the same range of groundwater usage in 2009 and 2010, potentially around 200 AFY. The City expects to utilize groundwater to supplement State Water during peak demand periods, but intends to minimize usage when possible to protect the resource.

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<sup>7</sup> Source: Northern Cities Management Area. (2010). Annual Monitoring Report.

<b>Table 4.5      Historic Groundwater Pumping (Guidebook Table 18)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>						
Basin Name	Metered or Unmetered	Historic Pumping Rates (AFY)				
		2006	2007	2008	2009	2010
Santa Maria Valley Groundwater Basin (Tri-Cities Mesa Subbasin)	Metered	676	701	606	177	96
<b>Total Groundwater Pumped<sup>(2)</sup></b>		<b>676</b>	<b>701</b>	<b>606</b>	<b>177</b>	<b>96</b>
<b>Groundwater as Percent of Total Water Supply<sup>(3)</sup></b>		<b>24%</b>	<b>25%</b>	<b>21%</b>	<b>6%</b>	<b>3%</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. Groundwater volumes taken from DWR statistic sheets 2006-2010, provided by the City. 3. Percentages of total water supply 2006 through 2010 were calculated using the total supply volume available for 2010, listed in Table 4.3.						

<b>Table 4.6      Projected Groundwater Pumping (Guidebook Table 19)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>					
Basin Name	Projected Pumping Rates (AFY)				
	2015	2020	2025	2030	2035
Santa Maria Valley Groundwater Basin (Tri-Cities Mesa Subbasin)	200	200	200	200	200
<b>Total Groundwater Pumped</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>	<b>200</b>
<b>Groundwater as Percent of Total Water Supply<sup>(2)</sup></b>	<b>4%</b>	<b>4%</b>	<b>4%</b>	<b>4%</b>	<b>4%</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. Projected total water supply volumes are listed in Table 4.3 of this UWMP.					

## 4.4      TRANSFER AND EXCHANGE OPPORTUNITIES

The UWMPA requires that the UWMP address the opportunities for transfers or exchanges.

Law

*10631 (d). Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.*

The City does not transfer or exchange water with its neighboring water suppliers.

One transfer opportunity for the City lies within the 40 AFY of the City's 1,240 AFY of allocated surface water from the SWP, which is currently obligated to the Preserve Property, owned by Pismo-98, LLC. The City may have the opportunity to reallocate this supply for City use in the event that the property does not utilize this allocation, per the established agreement with the Preserve Property.

Table 4.7 describes the transfer opportunity for the City. The City does not have short- or long-term plans to utilize this source, and no specific proposed volume exists for this opportunity.

<b>Table 4.7      Transfer and Exchange Opportunities (Guidebook Table 20) 2010 Urban Water Management Plan City of Pismo Beach</b>			
<b>Transfer Agency</b>	<b>Transfer or Exchange</b>	<b>Short Term or Long Term</b>	<b>Proposed Volume (AFY)</b>
Preserve Property (Pismo-98, LLC)	Transfer	N/A	N/A
<b>Total</b>			<b>N/A</b>
<u>Notes:</u>			
1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.			

## 4.5      DESALINATED WATER OPPORTUNITIES

The UWMPA requires that the UWMP address the opportunities for development of desalinated water, including ocean water, brackish water, and groundwater.

Law

*10631 (i). Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long term supply.*

The City's coastal location provides for the possibility of using desalination as a method to providing municipal water supply. However, the City has determined that while the use of desalination is technically feasible, that it is the least cost-effective option for future water provision. Because of this, the City is not considering desalination as a water treatment or provision option at this time.

## 4.6      RECYCLED WATER OPPORTUNITIES

The UWMPA requires that the UWMP address the opportunities for development of recycled water, including the description of existing recycled water applications, quantities of wastewater currently being treated to recycled water standards, limitations on the use of available recycled water, an estimate of projected recycled water use, the feasibility of projected uses, and practices to encourage the use of recycled water.

*10633. Provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.*

*10633 (a). (Describe) the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.*

*10633 (b). (Describe) the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.*

*10633 (c). (Describe) the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.*

*10633 (d). (Describe and quantify) the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.*

*10633 (e). (Describe) the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.*

*10633 (f). (Describe the) actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.*

*10633 (g). (Provide a) plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.*

#### **4.6.1 Wastewater Treatment Facilities**

The Pismo Beach Wastewater Treatment Plant (WWTP) is owned and operated by the City. The WWTP receives wastewater from the City's wastewater collection system and serves a population of residential and commercial customers entirely within the City limits. The WWTP was originally constructed in 1955.

In 2000, the City adopted its Wastewater Treatment Plan Master Plan (WWTP Master Plan), which proposed upgrades to increase treatment capacity and treatment level to provide advanced secondary treatment. The current design flow capacity of the WWTP is 1.9 million gallons per day (MGD). The average flow observed in 2010 was 1.09 MGD, while peak hourly demands were typically between 3 MGD and 4.5 MGD. Maximum peak hourly demands in 2010 were observed at 7.29 MGD and 6.06 MGD in December and January, respectively.

Prior to upgrades, the WWTP consisted of a headworks structure with a manual bar screen and an aerated grit chamber, primary treatment via two clarifiers, and secondary treatment via three aeration tanks and secondary clarifiers. Solids handling included two anaerobic digesters, a dissolved-air flotation thickener, and a belt press. The effluent was disinfected with sodium hypochlorite.

WWTP upgrades were completed in 2006 and include the following:

- Headworks structure, primary clarifiers, secondary clarifiers, and chlorine contact basin were all demolished or taken out of service.
- A new headworks structure, operations center/laboratory building, oxidation ditches, secondary clarifiers, and sludge pumping station were built.
- Existing aeration basins were converted to the new chlorine contact basin.
- Effluent pump station was upgraded.

Effluent from the WWTP is currently discharged through a shared outfall to the Pacific Ocean. The ocean outfall has a total capacity of 8.5 MGD,<sup>8</sup> of which the City is entitled to 44 percent.<sup>9</sup> The WWTP operates under Waste Discharge Requirements (WDR) Order No. R3-2004-0051. Among other water quality limitations, the WDR states that discharge to the ocean outfall from the City's WWTP is not to exceed a monthly average of 1.9 MGD.

#### **4.6.2 Water Recycling Facilities**

The City's WWTP currently treats its effluent to an advanced (disinfected) secondary treatment level, as defined by California Code of Regulations (CCR) Title 22 requirements. The WWTP facilities do not currently include the treatment capacity or conveyance system required to provide recycled water to interested customers. However, the City is in the process of planning a WWTP facility expansion and distribution system to deliver recycled water that meets appropriate Title 22 standards. As described in the Price Canyon Draft EIR, the intended application of recycled water will determine the treatment level required. Table 4.8 describes the potential uses of recycled water within the City and Price Canyon development project and associated treatment requirements for recycled water use.

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<sup>8</sup> Source: City of Pismo Beach. (2000). Wastewater Collection System Master Plan.

<sup>9</sup> Source: City of Pismo Beach. (Sept 2010). Draft Environmental Impact Report on Price Canyon Planning Area, General Plan Update, SOI Change, Annexation and Specific Plan.

Table 4.8 Price Canyon Potential Recycled Water Uses 2010 Urban Water Management Plan City of Pismo Beach			
Potential Uses	Treatment Level Required	Use Area Requirements (standard-specific)	Use Area Requirements (all standards)
Unrestricted access golf courses, residential, landscaping, parks	Disinfected Tertiary	<ul style="list-style-type: none"><li>• No irrigation within 50 ft. of any domestic water well unless special conditions are met</li><li>• No impoundment within 100 ft. of any domestic well</li></ul>	<ul style="list-style-type: none"><li>• Any irrigation runoff shall be confined to the recycled water use area</li><li>• Spray, mist, or runoff shall not enter dwellings, outdoor eating areas, or food handling facilities and drinking water fountains shall be protected from exposure to recycled water</li><li>• Recycled water notification signs must be posted</li><li>• No connections between potable water and recycled water systems and no hose bibs in public areas</li></ul>
Restricted access golf course irrigation	Disinfected Secondary- 23	<ul style="list-style-type: none"><li>• No irrigation with, or impoundment of disinfected secondary-23 recycled water within 100 feet of any domestic water supply well</li><li>• No spray irrigation within 100 feet of any residence or publicly accessible area</li></ul>	
Vineyards and orchards where recycled water does not come into contact with edible portion of crop	Undisinfected Secondary	<ul style="list-style-type: none"><li>• No irrigation with, or impoundment of undisinfected secondary recycled water within 150 feet of any domestic water well</li><li>• No spray irrigation within 100 feet of any residence or publicly accessible area</li></ul>	
<u>Notes:</u> <ul style="list-style-type: none"><li>1. Table adapted from Table V-B.4 in the Draft Environmental Impact Report (September 2010).</li><li>2. Requirements summarized from California Health Laws Related to Recycled Water, California Department of Health Services, June 2001.</li></ul>			

The City does not currently have an implementation timeline associated with its recycled water upgrades and distribution system. However, as the Price Canyon development project and General Plan update move forward, the need for recycled water will become more prevalent. The City is motivated to incorporate recycled water as a water supply option in an effort to reduce stress on groundwater supplies, reduce reliance on potable surface water, and sustainably manage its water resources. Therefore, the City intends to continue to develop its recycled water program and plan for substantial incorporation of recycled water as a water supply option in the future.

#### 4.6.3 Wastewater Generation

Table 4.9 includes the historical and projected wastewater flows collected and treated within the service area. The projected volumes that will meet recycled water standards are estimated. A timeline for recycled water implementation has not yet been determined.

A review of the City's Wastewater Collection System Master Plan (Carollo, 2000) and Wastewater Facilities Project Report (Carollo, 2002) showed that overall wastewater per capita flow factors are between 140 and 160 gpcd. The historical overall per capita flow factors were calculated for years 2005 through 2010 and averaged to be 149 gpcd. Since this average corresponds to recent flows and previously-projected flows for the City, 149 gpcd was used to determine projected wastewater flows. Actual wastewater flows will be affected by the relative distribution of land uses for new developments and actual increase in population.

<b>Table 4.9      Recycled Water – Wastewater Collection and Treatment (Guidebook Table 21)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>							
Type of Wastewater	Volume (AFY)						
	2005	2010	2015	2020	2025	2030	2035
Wastewater Collected and Treated in Service Area <sup>(2),(3)</sup>	1,307	1,421	1,558	1,698	1,840	1,985	1,421
Volume that meets recycled water standard	0	1,421	1,558	1,698	1,840	1,985	1,421
<b>Notes:</b>							
1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. 2005 and 2010 wastewater flows based on actual plant data. 3. Wastewater flow projections for 2015 – 2035 based on wastewater flows from 2005 – 2010 and per capita wastewater projections presented herein.							

Table 4.10 summarizes the projected methods of disposal of wastewater flows that is not treated to Title 22 standards. Volumes of non-recycled wastewater disposal will be dependent on the future implementation of recycled water upgrades and delivery system installation. The City would like to treat all future wastewater flows to Title 22 standards and to use its total wastewater flow for beneficial use (land application or groundwater recharge). Therefore, the City plans to have no non-recycled water flow. However, if some volume of non-recycled water is still present after recycled water implementation, the City will likely continue to dispose of it through the ocean outfall.

#### 4.6.4 Current Recycled Water Use

The City does not currently utilize recycled water. Therefore, there were no actual or projected uses for recycled water for 2010, as summarized in Table 4.11.

<b>Table 4.10    Recycled Water – Non-Recycled Wastewater Disposal (Guidebook Table 22)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>							
Method of Disposal	Treatment Level	Volume (AFY)					
		2010	2015	2020	2025	2030	2035
Pacific Ocean Outfall	Disinfected Secondary	1,220	0	0	0	0	0
<b>Total</b>		<b>1,220</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.							

<b>Table 4.11    2010 Recycled Water Use Compared to 2005 UWMP Use Projections (Guidebook Table 24)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>		
User Type	Volume (AFY)	
	2010 Actual	2005 Projection for 2010
Agricultural Irrigation	0	0
Landscape Irrigation	0	0
Commercial Irrigation	0	0
Golf Course Irrigation	0	0
Wildlife Habitat	0	0
Wetlands	0	0
Industrial Reuse	0	0
Groundwater Recharge	0	0
Seawater Barrier	0	0
Geothermal Energy	0	0
Indirect Potable Reuse	0	0
Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.		

#### **4.6.5 Projected Recycled Water Use**

The City has prepared several important documents analyzing potential uses of recycled water, including a Water Reuse Study (Carollo Engineers, 2007) and an Incremental Reclaimed Wastewater Study (RRM, 2008). In addition, the City has prepared a Wastewater Collection System Master Plan (Carollo Engineers, 2000) and a Sewer System Master Plan (Carollo Engineers, 2007). As such, the City has developed a detailed and specific understanding of the potential for implementation of recycled water in the community.

The City's 2007 Water Reuse Study identified potential users of recycled water and corresponding demands of recycled water in the community. Table 4.12 describes the potential uses of recycled water.

The Water Reuse Study proposed a two-phase implementation schedule of recycled water upgrades and conveyance system installation. In Phase 1, it was recommended that the Pismo Beach Sports Complex (adjacent to the WWTP) be connected to a recycled water pipeline. The irrigation demand of that sports complex alone is 15.5 AFY (2007 estimate). In Phase 2, it was recommended that the future development project in Price Canyon be connected to the recycled water system.

Since the City intends to apply recycled water use to follow the Specific Plan implementation, the City may begin regional facility planning efforts regarding recycled water within the next five years. Since use of recycled water for landscape and agricultural irrigation is a key component of the Price Canyon development, progress on implementation of the Specific Plan should coincide with availability of recycled water supplies.

Uses of recycled water for the applications listed in Table 4.12 are entirely dependent on the implementation schedule of WWTP upgrade and construction of a recycled water distribution system. Some of the values included in Table 4.12 are for example purposes only, since actual land area estimates for recycled water application have not yet been finalized. Therefore, the values listed are estimated volumes, and were determined assuming gradual implementation of recycled water use in the City. For example, application of recycled water for landscape and commercial irrigation was estimated for each year assuming gradual implementation of 25, 50, 75, and 100 percent of the total projected irrigation volumes over the course of 15 years, starting in the year 2015. In general, the values listed for the year 2035 are ultimate projected recycled water uses, at which point the City may have achieved buildout within its current City limits and substantial growth within the Price Canyon Planning Area.

<b>Table 4.12 Recycled Water – Potential Future Use (Guidebook Table 23)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>							
User Type	Description	Feasible?	Volume (AFY)				
			2015	2020	2025	2030	2035
Agricultural Irrigation <sup>(2)</sup>	Price Canyon Vineyards	Yes	60	60	60	60	60
Landscape Irrigation <sup>(3)</sup>	Parks and Residential	Yes	462	462	462	462	462
Commercial Irrigation <sup>(4)</sup>	Commercial	Yes	58	58	58	58	58
Golf Course Irrigation <sup>(5)</sup>	Pismo State Beach Golf Course and Golf Course Proposed for Planning Area	Yes	77	77	131	131	131
Wildlife Habitat	N/A	N/A	0	0	0	0	0
Wetlands	N/A	N/A	0	0	0	0	0
Industrial Reuse	N/A	N/A	0	0	0	0	0
Groundwater Recharge <sup>(6)</sup>	Percolation Basins or Stream Discharge	Yes	764	901	987	1,129	1,274
Seawater Barrier	N/A	N/A	0	0	0	0	0
Geothermal Energy	N/A	N/A	0	0	0	0	0
Indirect Potable Reuse	N/A	N/A	0	0	0	0	0
Other	N/A	N/A	0	0	0	0	0
<b>Total<sup>(7)</sup></b>			<b>1,421</b>	<b>1,558</b>	<b>1,698</b>	<b>1,840</b>	<b>1,985</b>

**Table 4.12 Recycled Water – Potential Future Use (Guidebook Table 23)  
2010 Urban Water Management Plan  
City of Pismo Beach**

User Type	Description	Feasible?	Volume (AFY)				
			2015	2020	2025	2030	2035
<u>Notes:</u>							
<ol style="list-style-type: none"><li>1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.</li><li>2. Assumes approximately 120 acres of agricultural land with an average demand of 0.5 AFY/acre (typical of established vineyard crops).</li><li>3. Includes the following potential landscape uses:<ul style="list-style-type: none"><li>-252 AFY estimated in Table 2.1 in the City's Water Reuse Study (2007)</li><li>-180 AFY from minimum 20 to 25 percent landscape lot coverage for residential homes in Price Canyon, calculated using the DWR's California Water Efficient Landscape Ordinance Water Budget Calculator</li><li>-30 AFY of potential park irrigation demand, based on historical park water usage of 3 AFY and proposed 10-acre park</li></ul></li><li>4. Potential commercial uses includes those projected in Table 2.1 of the City's Water Reuse Study (2007), as well as 15 AFY for commercial development in Price Canyon (found using DWR's Water Budget Calculator for Water Efficient Landscapes).</li><li>5. Estimated from proposed total water demand of the two golf courses within the City's SOI once the Specific Plan is implemented. Includes demand of 54 AFY from the golf course in the Price Canyon Planning Area and 77 AFY demand from the Pismo State Beach Golf Course.</li><li>6. All of the recycled water not used for other applications in this table may be applied towards groundwater recharge operations.</li><li>7. Total potential recycled water volumes are the same as treated wastewater volumes that meet Title 22 standards. The City would like to use all of its WWTP effluent for beneficial use within the City.</li></ol>							

Total potential recycled water volumes are the same as treated wastewater volumes that meet Title 22 standards (Table 4.9). The City would like to use all of its WWTP effluent for beneficial use within the City.

#### **4.6.6 Limitations for Recycled Water Use**

The City intends to utilize recycled water as a long-term resource to offset potable water use for irrigation, as well as for use in a groundwater recharge and recovery program. Future usage of recycled water is entirely dependent on implementation of the Specific Plan and coinciding implementation of a recycled water delivery system to appropriate locations within the City limits and Planning Area. Though there is no existing implementation timeline, this is not considered a limiting factor for recycled water implementation because of the City's intentions for long-term resource planning with recycled water.

However, one primary limitation does exist that may affect the ability of recycled water to be used for certain applications. The City has identified several locations in its wastewater collection system known as "salt hot spots," where seawater may be infiltrating the conveyance pipelines. When seawater infiltrates into the wastewater flows, the salt concentration (measured by total dissolved solids and by electrical conductivity) in WWTP

effluent consequently increases. Currently, the salt content of the WWTP effluent exceeds values that are considered suitable for irrigation, and are higher than desirable for use with groundwater recharge.

To mitigate the seawater intrusion into wastewater conveyance system, the City may consider systematic rehabilitation of the low-lying sewers near the Pacific Ocean where salt hot spots occur. In doing so, the City would reduce the salt concentration in wastewater flows to make it more saleable for irrigation and recharge. In addition, influent wastewater flows would be reduced, which would reduce treatment and disposal costs. The City may investigate grant opportunities to assist with future sewer system rehabilitation projects.

#### 4.6.7 Encouraging Recycled Water Use

Use of recycled water to offset potable water supply is a critical aspect of water resources planning for future development projects and SOI expansion. As such, the City will need to develop a plan for encouraging recycled water use for potential customers. By encouraging recycled water use, the City will establish contracted recycled water users and ensure the long-term conservation of potable water resources.

To encourage use of recycled water, the City may hold educational workshops to inform and involve stakeholders, including developers and business owners in the proposed Price Canyon Planning Area. The City has and will continue to work closely with stakeholders to evaluate recycled water program alternatives and establish long-term contractors for recycled water applications. The City may hold visioning and educational workshops to identify and address stakeholder concerns, to determine stakeholder values and challenges, and to develop public support of recycled water use.

The City will determine the specific methods to encourage use of recycled water as development and implementation of the Specific Plan continues. The City does not currently have developed plans to offer financial incentives or other activities to encourage recycled water use (Table 4.13).

<b>Table 4.13 Methods to Encourage Recycled Water Use (Guidebook Table 25) 2010 Urban Water Management Plan City of Pismo Beach</b>						
<b>Actions</b>	<b>Projected Volume (AFY)</b>					
	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
Financial Incentives	N/A	N/A	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A	N/A	N/A
<b>Notes:</b>						
1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.						

#### **4.6.8 Recycled Water Use Optimization Plan**

The City is motivated to utilize recycled water resources to the maximum extent possible. To do so, the City will consider a variety of applications of recycled water that will optimize use of potable and non-potable water resources.

A primary application of recycled water will be for landscape and agricultural irrigation within the current City limits as well as the new development areas of Price Canyon and LRDM. For existing parks, landscapes, and recreational areas, installation of new recycled water infrastructure will be beneficial in preserving potable water resources, but may be an expensive endeavor depending on location and accessibility of potential reuse locations. The new developments, however, provide the City with the opportunity to incorporate recycled water extensively within the plumbing structure of the community. Utilization of recycled water for residential, commercial, agricultural, and other landscape irrigation would directly result in hundreds if not thousands of additional acre-feet of potable water available for other required uses, or drought protection, in the City.

Another potential application of recycled water is groundwater recharge, with the potential dual purpose of sea water intrusion barrier. There may be an opportunity in the future for the City to deliver a portion of its recycled water to recharge basins located in the Grover Beach area. Recharge basins serve to not only enhance groundwater volume for later use, but help protect groundwater resources from water quality impacts by encouraging healthy recharge rates. In addition, as discussed in Sections 4.2.3 and 4.2.4, seawater intrusion is a prevalent issue that has threatened the City's groundwater resources in the past. Within the last few years, the City and surrounding communities have taken measures such as reduced pumping to minimize the potential negative impacts of seawater intrusion. An additional measure that the City may consider to is injection of recycled water into the groundwater aquifers, thereby enhancing availability of groundwater supplies as well as protecting the resource.

### **4.7 FUTURE WATER PROJECTS**

The UWMPA requires that suppliers describe water supply projects and programs may be undertaken to meet the projected water demands.

*10631 (h). (Describe) all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.*

The proposed Price Canyon and LRDM developments will require additional water sources to provide long-term sufficient supply for its residents and visitors. As described in previous sections, the City intends to acquire additional supply from surface water allocations of the SWP (at no charge to current residents), as well as develop a wide-spread recycled water distribution system to offset potable water use. In addition, a groundwater recharge and recovery program could be implemented by the City to augment the groundwater supply, and to augment the water supply needs of the Price Canyon development area.

#### **4.7.1 Surface Water**

As described in Section 4.1.3.3, the City intends to request from the SLOFCWCD an additional allocation of surface water supply from the SWP. The City has requested that an additional deliverable SWP supply of 500 AFY be considered to serve its growing population. Therefore, with the current 1,240 AFY of SWP entitlement, the City will receive 1,740 AFY when appropriate approvals are made. The City has additionally requested a drought buffer totaling 2,740 AFY to provide additional supply when State Water resources are decreased during drought conditions. The existence of the drought buffer provides the City with assurance that it will receive enough supply to meet demands, even during drought periods. Since the City's requested drought buffer is greater than two times its deliverable supply, based on the conditions of the drought buffer program, the City will receive its future full 1,740 AFY allocation even when State Water deliveries are reduced by 60 percent. The City expects to be allotted these SWP allocations as the Price Canyon development project moves forward, and the SWP supplies may be available as early as 2015.

#### **4.7.2 Recycled Water**

As described in Section 4.6, the City intends to develop an extensive recycled water program to offset potable water use in the Price Canyon Planning Area, particularly for agricultural irrigation and some residential irrigation. Use of recycled water will require a WWTP upgrade to provide tertiary treatment and disinfection, installation of delivery lines and a pumping station, and seasonal storage for agricultural application. The City is committed to developing a comprehensive and widespread recycled water system that will ultimately reduce stress and reliance on groundwater resources. The projected supply from

recycled water is anticipated to start at about 1,450 AFY in 2015, but will be based on treated wastewater volumes and potential WWTP upgrade capacities. The City intends to perform its WWTP upgrades and begin installation of recycled water delivery lines simultaneously with the beginning phases of Specific Plan implementation. Implementation of recycled water use in the Planning Area will serve as a primary alternative irrigation water source during peak seasonal demand, and will offset potable groundwater used for irrigation.

#### **4.7.3 Groundwater Recharge and Recovery**

Once recycled water becomes available for use, the City may consider implementation of a Groundwater Recharge and Recovery Program (GRRP) to augment groundwater supplies. One application of the GRRP may be in association with the Price Canyon development, to enhance groundwater available for private agricultural application. The City may also consider recharge utilizing groundwater percolation basins in the Grover Beach area, closer to its municipal well fields and adjudicated aquifer. Any type of GRRP implemented in this area may also serve a dual purpose as seawater intrusion barrier, which will further protect the City's municipal groundwater resources.

Table 4.14 provides a summary of the future water supply projects for the City. In the case of recycled water and GRRP, the values listed below are hypothetical volumes for example purposes. Actual availability of recycled water for these applications will depend on WWTP upgrades, wastewater flow rates, installation of a "purple pipe" delivery system, and securing of recycled water customers or recharge locations.

<b>Table 4.14 Future Water Supply Projects (Guidebook Table 26)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>								
Project Name	Projected Start Date	Projected Completion Date	Potential Project Constraints	Projected Supply (AFY)				
				Normal-Year Supply <sup>(2)</sup>	Single-Dry Year Supply	Multiple-Dry Year First Year Supply	Multiple-Dry Year Second Year Supply	Multiple-Dry Year Third Year Supply
State Water Project <sup>(3)</sup>	2015	Ongoing	None	500	30	120	120	120
Recycled Water <sup>(4)</sup>	TBD	Ongoing	Upgrade to WWTP	1,421	1,421	1,421	1,421	1,421
Recycled Water Recharge and Recovery Program	TBD	Ongoing	Dependent on recycled water upgrades and implementation	764	764	764	764	764
<b>Total</b>				<b>1,921</b>	<b>1,451</b>	<b>1,541</b>	<b>1,541</b>	<b>1,541</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. Normal-year supply represents anticipated supply volume for the year 2015. 3. Supply reliability of the State Water Project during normal and dry water years is discussed in Chapter 5. 4. Recycled water supplies are based on wastewater production, and therefore may not be reduce in dry years.								

## **WATER SUPPLY RELIABILITY AND WATER SHORTAGE CONTINGENCY PLANNING**

This chapter describes the reliability of the City of Pismo Beach's (City's) water supplies, including a discussion of the City's water shortage contingency plan, as well as potential supply disruptions associated with water quality issues and drought.

### **5.1 WATER SUPPLY RELIABILITY**

The Urban Water Management Planning Act (UWMPA) requires that the Urban Water Management Plan (UWMP) address the reliability of the agency's water supplies. This includes a description of supplies that are vulnerable to seasonal or climatic variations.

#### **Law**

*10631 (f). An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.*

*10631 (c) (2). For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to replace that source with alternative sources or water demand management measures, to the extent practicable.*

This section describes the water supply reliability of the water supply sources for the City.

#### **5.1.1 Resource Maximization/Import Minimization**

The City recognizes the importance of maintaining a high quality reliable water supply. Although water is a renewable resource, there is a limit on the amount of water that can be sustainably drawn from a given supply source (e.g., groundwater basins, surface water sources). The main focus for the City is to maximize the efficient use of water and to promote conservation. This will be accomplished through the continued implementation of demand management measures (DMMs) currently being implemented by the City as well as other conservation activities.

The City is committed to maximizing its use of current supply sources. As described in Chapter 4 of this UWMP, the City has groundwater and surface water resources available to meet existing and projected demands. The City is working to secure additional surface water supplies from the State Water Project (SWP) to reduce stress on groundwater aquifers and reliance on groundwater resources. In addition, the City intends to implement use of recycled water in a widespread effort to offset potable water use for agricultural, landscape, and other irrigation demands, as well as groundwater recharge.

### **5.1.2 Factors Affecting Supply Reliability**

There are a variety of factors that can impact water supply reliability. Factors impacting the City's supply sources are indicated as appropriate in Table 5.1. A brief discussion on each of these factors is provided below.

A fundamental factor that affects water supply reliability is the hydraulic capacity of supply and distribution system facilities (e.g., groundwater wells, treatment facilities, transmission mains). As the City continues to grow, it will construct the additional supply and distribution system facilities necessary to accommodate the increased water demands associated with this growth. For this reason, the physical capacity of the City's supply facilities is assumed to not be a limiting factor affecting the reliability of the City's supply in the future, and is not listed in Table 5.1.

#### **5.1.2.1 Legal Factors**

The legal factors affecting supply reliability apply to the City's entitlement to groundwater from the Tri-Cities Mesa Subbasin (Subbasin), within the Santa Maria River Valley Groundwater Basin (Basin). Since the Basin is adjudicated, the City is entitled only to 700 AFY of groundwater from the Subbasin, as dictated by the Gentlemen's agreement (Appendix J) and 2008 basin adjudication judgment (Appendix K). The basin adjudication judgment suggests that the allocated groundwater rights may be decreased in the future if drought and/or overdraft conditions persist. Therefore, if groundwater supplies are limited or reduced in this area, the City's entitlement may be reduced. To prevent groundwater supplies from being reduced, the City may develop a groundwater recharge and recovery program utilizing recycled water to enhance its groundwater supply. A groundwater recharge and recovery program will help to protect groundwater resources, enhance supply, and minimize the impacts due to seawater intrusion.

#### **5.1.2.2 Environmental Factors**

Environmental factors affecting water supply reliability typically include concerns over protection of ecosystems, particularly for fish and wildlife resources. To date, the City's groundwater supply has not been impacted by any environmental factors, and the City does not anticipate future disruption of groundwater supply as a result of environmental factors.

The City's surface water supply from the SWP has the potential to be affected by environmental issues, particularly involving the Delta smelt in the Sacramento-San Joaquin Delta issues. SWP pumping capacities were reduced as a result of the May 2007 federal court ruling to protect Delta smelt. However, the City and other local SWP users have not been negatively affected to date by reduced SWP supplies since San Luis Obispo County's (County) allocations to its subcontractors are typically fulfilled, even in dry years. This is due to the County's maintenance of excess, unused SWP entitlement. Therefore, even when State Water supplies are decreased, the County's excess SWP entitlement provides a buffer so that contracted volumes to water purveyors, like the City, may still be provided in

<b>Table 5.1 Factors Resulting in Inconsistency of Supply (Guidebook Table 29)</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>						
Water Supply Sources	Specific Source Name	Limitation Quantification <sup>(2)</sup>	Factors Affecting Supply			
			Legal	Environmental	Water Quality	Climatic
Surface Water	State Water Project – Coastal Branch	1,740 AFY	None	Sacramento-San Joaquin Delta issues	None	Reduced available supply
Surface Water	Lopez Reservoir	896 AFY	None	Threatened Species	None	Drought conditions
Groundwater	Tri-Cities Mesa Subbasin	700 AFY	Change to adjudication requirements	None	Seawater intrusion	Limited recharge/ drought conditions
Recycled Water	Pismo Beach Wastewater Treatment Plant	1,200 AFY <sup>(3)</sup>	None	None	None	None
<b>Notes:</b> 1. “Guidebook Table X” refers to a specific table in the “Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan” by DWR. 2. Represents total available supply for each source. Actual limitations are unknown, and will vary on a case-by-case basis. 3. The City is currently developing a recycled water implementation plan, which will include projected available volumes of recycled water. 1,200 AFY is a rounded value, approximately equal to the City’s 2010 wastewater flows. The City would like to use all of its treated wastewater effluent for recycled water applications.						

full. However, it is possible that the Delta's fragile ecosystem, along with severely decreased precipitation patterns, may affect SWP supply reliability for the City at some point in the future.<sup>1</sup>

Surface water from the Lopez Reservoir, managed by the San Luis Obispo County Flood Control and Water Conservation District (SLOFCWCD), is a generally reliable water supply source for the City. However, deliveries have the potential to be affected by the presence of steelhead trout and the California red-legged frog that utilize the Arroyo Grande Creek watershed downstream of Lopez Dam, and are considered threatened species under the Federal Endangered Species Act. The Endangered Species Act permits non-federal entities to obtain incidental take authorization for protected species by developing a Habitat Conservation Plan (HCP). As such, the SLOFCWCD has developed a HCP that describes commitments and assurances associated with the implementation of measures to avoid, minimize, and mitigate impacts of management activities on threatened species. The SLOFCWCD's associated incidental take permit is valid through 2025. Therefore, it is anticipated that the SLOFCWCD will maintain its HCP, and there are no expected supply issues that may arise as a result of environmental issues with Lopez Reservoir.

#### **5.1.2.3 Water Quality Factors**

The primary water quality factor affecting supply reliability for the City is the threat of seawater intrusion into fresh groundwater aquifers. Under natural and historical conditions, a net outflow of freshwater from the groundwater basin towards the ocean has kept the seawater/freshwater interface from moving onshore. However, the Northern Cities Management Area (NCMA) monitoring event of 2008 indicated coastal groundwater elevations that were below mean sea level (MSL), allowing for the potential for seawater intrusion. Affected coastal cities (including Pismo Beach) implemented water conservation methods and reduced groundwater pumping, ultimately resulting in significant recovery of groundwater elevations to above MSL. Though a broad pumping trough with depressed groundwater elevations still exists below the municipal well field, the increased groundwater elevations help prevent further threat of seawater intrusion. If groundwater supplies become overdrawn or significantly stressed in the future, seawater intrusion may pose additional threat to the water quality of the City's groundwater supply.

#### **5.1.2.4 Climatic Factors**

Climatic factors affecting the reliability of a given water supply system generally are a function of seasonal precipitation and runoff characteristics. As such, limited recharge and/or drought conditions pose threats to availability of both surface water and groundwater supplies.

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<sup>1</sup> Source: Northern Cities Management Area. (2010). Annual Monitoring Report.

California has experienced below-average precipitation and runoff since approximately 2006, resulting in reduced storage in SWP reservoirs. In response, DWR has continued to limit SWP allocations to contractors. However, the County's current condition of excess allocation has resulted in the City continually receiving its contracted allocation in full. Reduced storage in aquifers may pose a threat to surface water supply availability during potential future drought conditions.

The natural groundwater hydrology of the area underlying the City results in limited aquifer storage capacity and a higher sensitivity to drought conditions. When yearly precipitation is low, groundwater recharge is not sufficient to meet pumping demands and still maintain a safe yield. Therefore, the City's groundwater supplies will likely be negatively affected in future drought conditions with below-average rainfall and recharge. The adjudication judgment (Appendix K) and Gentlemen's Agreement (Appendix J) regarding the City's groundwater entitlement does not specify reductions in allocations during drought conditions or decreased groundwater supply. The lack of guidance on supply reductions indicates that the City may maintain its full groundwater allocation even during drought conditions. However, the City has requested additional surface water allocation from the SWP, and is planning to use recycled water to augment groundwater supplies during droughts.

## 5.2 WATER SHORTAGE CONTINGENCY PLANNING

The UWMPA requires that the UWMP include an urban water shortage contingency analysis that addresses specified issues.

### Law

*10632 (a). (Describe) stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.*

*10632 (c). Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.*

*10632 (d). Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.*

*10632 (e). Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.*

*10632 (f). Penalties or charges for excessive use, where applicable.*

*10632 (g). An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water*

*supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.*

*10632 (h). A draft water shortage contingency resolution or ordinance.*

*10632 (i). (Provide) a mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.*

In 1985, the City Council adopted a Water Operational Policy that established that the City had over-committed its water supply for future development. As a result, the City developed a conservation plan that would potentially save 10 to 15 percent of total water use in the event that surplus from the Lopez Reservoir was not available. A primary component of this policy was a conservation program aimed at instituting demand management measures before a substantial supply deficit occurred, therefore continually maintaining a reliable water supply.

In 1990, the City adopted a Mandatory Water Conservation Ordinance that details four water supply conditions of the City. The purpose of the water conservation ordinance is to give the City Council the authority to declare varying stages of water use restriction based on water supply availability. In addition, the City has implemented a development conservation plan that requires all new development to meet rigid standards for both indoor and outdoor water use.

Finally, in 1992, the City adopted a Water Shortage Contingency Plan (Appendix L), which addresses availability of water supplies for the City and includes the City's Water Contingency Plan, which outlines steps that the City will take to augment water supplies and reduce the level of rationing.

The primary goal of the City's water conservation program is to eliminate water waste by using water more efficiently, which has a positive impact on the City's water supply resources. The specific objectives of the water conservation program are:

- Educate and inform water customers on short- and long-term water supply conditions and the importance of efficient water use;
- Replace old pumping hardware with water efficient plumbing hardware;
- Evaluate water customers' indoor and outdoor water usage and provide specific recommendations for improved efficiency;
- Analyze water efficiency programs for cost effectiveness;
- Develop new water efficiency programs;
- Monitor and enforce water conservation municipal codes.

### 5.2.1 Stages of Action and Reduction Objectives

The City's water conservation ordinance describes four stages of rationing that may be invoked during water supply shortages. Each stage includes a water reduction objective, in percent of normal water demands, which may vary based on the nature of water supply emergency. The rationing plan is dependent on the cause, severity, and anticipated duration of the water supply shortage. A combination of voluntary and mandatory water conservation measures would be used to reduce water usage in the event of water shortages. Table 5.2 shows the four stages and their representative shortages.

Declarations of water supply conditions occur periodically after evaluation by the City Council. The respective water supply condition dictates the voluntary or mandatory water conservation measures in effect at any particular time in the City.

<b>Table 5.2 Water Shortage Contingency - Rationing Stages (Guidebook Table 35) 2010 Urban Water Management Plan City of Pismo Beach</b>		
<b>Stage</b>	<b>Condition</b>	<b>Reduction Objective</b>
I – Normal Water Supply Conditions	<ul style="list-style-type: none"><li>• Average rainfall in the previous 12-24 months</li><li>• All municipal supplies available</li><li>• Normal weather patterns</li></ul>	No reduction in total water demands from baseline
II – Moderately Restricted Water Supply Conditions	<ul style="list-style-type: none"><li>• Below average rainfall in the previous 12-24 months</li><li>• 10 percent or more of municipal supply unavailable</li><li>• Warm weather patterns typical of summer months</li></ul>	10-20% reduction in total water demands from baseline
III – Severely Restricted Water Supply Conditions	<ul style="list-style-type: none"><li>• Below average rainfall in the previous 24-36 months</li><li>• Prolonged periods of low water pressure</li><li>• 10 percent or more of municipal supply unavailable</li><li>• Warm weather typical of summer months</li></ul>	20-35% reduction in total water demands from baseline
IV – Critical Water Supply Conditions	<ul style="list-style-type: none"><li>• Below average rainfall in the previous 36 months</li><li>• Prolonged periods of low water pressure</li><li>• 10 percent or more of municipal supply unavailable</li><li>• Warm weather patterns typical of summer months</li></ul>	35-50% reduction in total water demands from baseline

The City is responsible for supplying water for the health and safety needs of the community. If it appears that the City may be unable to supply the normal demands and requirements of the water customers, the City Council may, by resolution, declare a water

supply shortage condition. Based on the severity of the predicted shortage, the City will take the following actions:

**Stage I: Normal Water Supply Conditions.** Normal water supply conditions are typified by the following:

- A. Outdoor water use for washing vehicles, boats, paved surfaces, buildings and other similar uses shall be attended and have hand-controlled water devices, typically including spring loaded shutoff nozzles.
- B. Outdoor irrigation resulting in excessive gutter runoff is prohibited.
- C. Restaurants shall serve drinking water only in response to a specific request by a customer.

**Stage II: Moderately Restricted Water Supply Conditions.** Moderately restricted water supply conditions are typified by the following:

- A. Use of water which results in excessive gutter runoff is prohibited.
- B. Outdoor water use for washing vehicles, boats, buildings or other similar uses shall be attended and have hand-controlled watering devices, typically including spring-loaded shutoff nozzles.
- C. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets, or other such uses except as found necessary by the City to protect the public health or safety.
- D. Outdoor Irrigation.
  - a. Outdoor irrigation is prohibited between the hours of ten a.m. and four p.m.;
  - b. Irrigation of private and public landscaping, turf areas and gardens is permitted at even-numbered addresses only on Mondays and Thursdays and at odd-numbered addresses only on Tuesdays and Fridays. All customers are directed to use no more water than necessary to maintain landscaping.
- E. Restaurants shall serve drinking water only in response to a specific request by a customer.
- F. Use of potable water for compaction or dust control purposes in construction activities is prohibited.

**Stage III: Severely Restricted Water Supply Conditions.** Severely restricted water supply conditions are typified by the following:

- A. Use of water which results in excessive gutter runoff is prohibited.
- B. Outdoor Water Use--Except Irrigation.
  - a. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets or other such use except where necessary to protect the public health and safety;

- b. Washing cars by use of a hose is prohibited. Use of a bucket is permitted subject to non-wasteful applications.
- C. Outdoor Irrigation.
  - a. Outdoor irrigation is prohibited between the hours of ten a.m. and four p.m.;
  - b. Irrigation of private and public landscaping, turf areas and gardens is permitted at even-numbered addresses only on Mondays and Thursdays and at odd-numbered addresses only on Tuesdays and Fridays. All customers are directed to use no more water than necessary to maintain landscaping.
- D. Restaurants shall serve drinking water only in response to a specific request by a customer.
- E. Emptying and refilling swimming pools and commercial spas is prohibited except to prevent structural damage and/or to provide for the public health and safety.
- F. Use of potable water for compaction or dust control purposes in construction activities is prohibited.

**Stage IV: Critical Water Supply Conditions.** In addition to the conditions specified for Stage III, the City Council may impose any water rationing requirement as it deems appropriate to protect public health, safety, welfare, comfort, and convenience.<sup>2</sup>

#### **5.2.1.1 Administration of Water Supply Shortage Program**

In the event of a declaration of a water shortage condition or emergency, the administration of a water conservation program would involve coordination of the City's established emergency services committee. As described in the City's Municipal Code (§2.32 Emergency Services), the City Manager will have the responsibility of acting as the director of emergency services, and developing and organizing disaster plans. In addition, an emergency services coordinator, chiefs of emergency services and departments, and other applicable City or emergency services representatives will each provide assistance in an emergency response, as appropriate.

The major elements to be considered in administering and implementing the program include:

- **Identifying the City staff members to fill the key roles on the water shortage management team.** It is anticipated that the City Manager would designate the appropriate individuals, including the program coordinator.
- **Intensifying the public information program to provide comprehensive information on the water shortage and necessary actions that must be undertaken by the City and by the public.** The scope of the public information program can be developed by reviewing published references, especially those published by the Department of Water Resources (DWR), and researching successful

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<sup>2</sup> Source: City of Pismo Beach Municipal Code (§ 13.24 Water Conservation).

aspects of the current programs conducted by neighboring water agencies. A public information hotline may be advisable to answer any questions regarding the program.

- **Monitoring program effectiveness.** Ongoing monitoring will be needed to track supply availability and actual water user reductions. This procedure will allow the City to continuously re-evaluate the situation and make informal decisions as to whether another reduction level is needed.
- **Enforcing program requirements.** For the 35 to 50 percent reduction programs, enforcement of water use prohibitions and water use allocations will be more important in achieving the program goals. Inspectors and enforcement personnel could be identified among City staff that is in the community on other business, such as police, street maintenance, meter readers, etc.
- **Dealing with equity issues that might arise from the mandatory restrictions or higher water rates.** Depending on the level of restriction, there may be a greater need to address specific concerns of individual customers who might have special conditions or extenuating circumstances and are unduly affected by the program. A procedure should be identified for dealing with such special requests and/or for reviewing specific accounts.
- **Coordinating with surrounding water management entities.** A groundwater shortage supply for the City would likely affect regional groundwater supplies as well. Therefore, if the City is forced to declare a water shortage condition, surrounding water districts may also be affected. Under the influence of a water shortage situation where the water shortage contingency plan must be implemented, it is critical that the City coordinate its water conservation efforts with surrounding water management entities.
- **Adjusting water rates.** Revenues from water sales should be reviewed periodically to determine whether an increase in rates might be needed to cover revenue shortfalls due to the decrease in demand.
- **Addressing new development proposals.** During periods of severe water shortage, it may be necessary to impose additional requirements on new development to reduce new demand or to temporarily curtail new service connections.

### **5.2.2 Actions during a Catastrophic Interruption**

The City has described its emergency response plan in Title 2, Chapter 2 – Emergency Services of the City’s Municipal Code. The City has developed a response plan and has organized its emergency efforts with applicable relief agencies and municipalities in the area.

### 5.2.3 Mandatory Prohibitions on Water Wasting

In the event of a critical water supply shortage, the City may implement mandatory compliance measures to induce water conservation. Mandatory compliance measures enacted during a water shortage are more severe than voluntary measures, produce greater savings, and are less costly to the utility. The principal drawback to these measures is the customer resentment if the measures are not seen as equitable. Therefore, such measures should be accompanied by a good public relations campaign.

The City's Municipal Code includes prohibition on various wasteful water uses during a declared water supply shortage. These mandatory prohibitions are implemented during Stages I, II, and III, and are listed in Table 5.3. During a Stage IV water supply shortage, the City Council may impose any water rationing requirement that it deems appropriate to protect public health, safety, welfare, comfort, and convenience.

<b>Table 5.3      Water Shortage Contingency - Mandatory Prohibitions (Guidebook Table 36) 2010 Urban Water Management Plan City of Pismo Beach</b>	
<b>Prohibitions</b>	<b>Mandatory Prohibition Stage</b>
Outdoor irrigation resulting in excessive gutter runoff.	Stage I
All use of water which results in excessive gutter runoff.	Stage II
Use of water for cleaning driveways, patios, parking lots, sidewalks, streets, or other such uses except as necessary to protect public health or safety.	Stage II
Outdoor irrigation between the hours of 10 AM and 4 PM.	Stage II
Use of potable water for compaction or dust control purposes in construction activities.	Stage II
Washing cars by use of a hose.	Stage III
Emptying and refilling of swimming pools and commercial spas is prohibited except to prevent structural damage and/or to protect public health or safety.	Stage III
<b>Notes:</b>	
1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.	
2. Mandatory prohibitions are from the City's Municipal Code (§13.24 Water Conservation).	

### 5.2.4 Consumption Reduction Methods in Most Restrictive Stage

In order to achieve a 50 percent reduction in water use during the most restrictive stage of a water supply condition, the City will implement and enforce the water prohibitions described in Section 5.2.3. Other mandated restrictions in water use for all reductions stages will be determined by the City Council, and may include the actions described in Table 5.4. The

reduction methods described in Table 5.4 are potential reduction methods that the City could implement if faced with an extreme water shortage situation.

## 5.2.5 Excessive Use Penalties

Any violation of the conservation regulations and restrictions on water use may result in termination of water service until the violation is corrected, and until all appropriate fees and penalties are paid in full. Table 5.5 lists the specifics of the penalties and in what stages they may occur.

## 5.2.6 Revenue and Expenditure Impacts/Measures to Overcome Impacts

The majority of operating costs for most water agencies are fixed rather than a function of the amount of water sold. As a result, when significant conservation programs are undertaken, it is frequently necessary to raise water rates because the revenue generated is based on lower total consumption while the revenue required is basically fixed. The City's Water Shortage Contingency Plan describes that to counteract the financial impact of conservation, the City may institute an increase in the rate structure so that lower projected water consumption would generate a new rate based on the revenue needed by the City's Water Enterprise fund.

<b>Table 5.4 Water Shortage Contingency - Consumption Reduction Methods (Guidebook Table 37) 2010 Urban Water Management Plan City of Pismo Beach</b>		
<b>Reduction Method Description</b>	<b>Stage When Method Takes Effect<sup>(2)</sup></b>	<b>Projected Reduction<sup>(3)</sup> (%)</b>
Prohibit or eliminate watering of ornamental turf areas, actively-used turf areas, trees, and shrubs.	Stage II - IV	Up to 50
Limit number of watering events per week. May include prescription of hand-held hoses with positive shutoff nozzle or drip irrigation systems. Prohibits or eliminates sprinkler use.	Stage II - IV	Up to 50
Restrict use of potable water for construction purposes. Require use of reclaimed or non-potable water for application to construction sites.	Stage II - IV	Up to 50
Require certification that a reduction of the projected average water usage for development of construction projects shall be achieved.	Stage II - IV	Up to 50

<b>Table 5.4      Water Shortage Contingency - Consumption Reduction Methods (Guidebook Table 37) 2010 Urban Water Management Plan City of Pismo Beach</b>		
<b>Reduction Method Description</b>	<b>Stage When Method Takes Effect<sup>(2)</sup></b>	<b>Projected Reduction<sup>(3)</sup> (%)</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. Consumption reduction measures will be implemented by the City as appropriate given the nature of the water supply shortage. 3. Projected reductions, in concept, should be capable of achieving a system-wide reduction of 50 percent.		

### 5.2.7      **Water Conservation Ordinance**

The City adopted its Water Conservation Ordinance in 1990. A copy of the City's Municipal Code containing the ordinance is included in Appendix M.

### 5.2.8      **Reduction Measuring Mechanism**

The City's primary mechanism of measuring water use and, subsequently, water use reduction, is through the use of water meters. Therefore, to measure actual reductions in water use in the course of carrying out a water supply shortage contingency plan, the City may perform water meter readings for individual connections.

<b>Table 5.5      Water Shortage Contingency - Penalties and Charges (Guidebook Table 38) 2010 Urban Water Management Plan City of Pismo Beach</b>	
<b>Penalty/Charge</b>	<b>Stage When Penalty Takes Effect</b>
Termination of water service until violations of the water conservation ordinance is corrected.	I, II, III, IV
Criminal misdemeanor for any person who knowingly and willfully violates the provisions in the City's Municipal code.	I, II, III, IV
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.	

## 5.3      **WATER QUALITY**

The UWMPA requires that the UWMP include a discussion of the water quality impacts on an agency's supply reliability.

## Law

*10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.*

This section describes the impacts of water quality on the City's water supply sources.

### **5.3.1 Source Management**

The City's water supply sources are managed by several different entities. All of the City's water supplies consistently meet state and federal primary and secondary drinking water standards.

The City manages pumping of groundwater from its municipal supply wells. Groundwater is disinfected before distribution to customers, and is regularly tested for contaminants including disinfection byproducts. The City's 2009 Water Quality Report shows that groundwater and surface water resources all met applicable drinking water standards (Appendix N).

The Central Coast Water Authority (CCWA) manages the Polonio Pass Water Treatment Plant (PPWTP) that treats surface water from the SWP. The CCWA has an operational relationship and agreement with the SLOFCWCD, and provides treated State Water to the Coastal Branch conveyance facilities of the SWP. Treated water from the PPWTP is conveyed to a Clearwater Reservoir, where it is combined with treated surface water from Lopez Reservoir and then distributed to water retailers like the City.

The Lopez Water Treatment Plant (Lopez WTP) is managed by the County. The Lopez WTP was upgraded in 2007 to include coagulation, flocculation, dissolved air floatation clarification, disinfection with chlorine dioxide, low-pressure membrane filtration, and additional disinfection with free chlorine. Effluent from the Lopez WTP is sent to a Clearwater Reservoir, where it meets influent State Water and is ultimately delivered to water retailers like the City. A process flow map of the Lopez WTP is included in Appendix O.

Recycled water treatment and delivery will be managed by the City. It is expected that the City will treat wastewater effluent to all applicable Title 22 standards, based on intended application.

### **5.3.2 Seawater Intrusion**

The primary water quality factor affecting supply reliability for the City is the threat of seawater intrusion into fresh groundwater aquifers. The area's geography and geology cause fresh water in the aquifers underlying the City to flow toward the ocean and form an interface between freshwater and seawater. Under natural and historical conditions within the NCMA, the differential pressure between the aquifer and seawater induces net outflow

of freshwater towards the ocean. This general flow direction of inland to the ocean establishes an interface between freshwater and salt water, and prevents saltwater from “intruding” on fresh groundwater sources. However, when groundwater elevations drop below sea level, the differential pressure exchange shifts to cause seawater to flow inland. This affects municipal wells supply and decreases available fresh water for urban use.

Recently, below-MSL groundwater elevations have allowed for the potential for seawater intrusion. Affected coastal cities in the Northern Cities Management Area (NCMA), including Pismo Beach implemented water conservation methods and reduced groundwater pumping, ultimately resulting in significant recovery of groundwater elevations to above MSL. If groundwater resources are not carefully monitored in the future, seawater intrusion may pose additional threat to the water quality of the City’s groundwater supply.

### **5.3.3 Water Quality Impacts Summary**

The quality of the City’s water system is regulated by the Department of Public Health (DPH), which requires regular collection and testing of water samples to ensure that the water quality meets regulatory standards and does not exceed MCLs. The City performs water quality testing, which has consistently met or exceeded regulatory standards.

The quality of existing surface water sources over the next 25 years is expected to be adequate. Surface water will continue to be treated to drinking water standards, and no water quality deficiencies are expected.

The quality of existing groundwater supplies is threatened by seawater intrusion. Due to the proximity of the City’s municipal supply wells near the coastline, seawater intrusion will likely be a threat to water quality in future years as wells. However, the City is currently working with other coastal groundwater purveyors to manage groundwater resources effectively and sustainably to prevent future impacts to water quality from seawater intrusion. Table 5.6 below summarizes the current and projected water supply changes due to water quality.

**Table 5.6 Water Quality - Current and Projected Water Supply Impacts  
(Guidebook Table 30)  
2010 Urban Water Management Plan  
City of Pismo Beach**

Water Source	Description of Condition	Potential Supply Impacts (AFY)					
		2010	2015	2020	2025	2030	2035
State Water	None	0	0	0	0	0	0
Lopez Reservoir	None	0	0	0	0	0	0
Groundwater <sup>(2)</sup>	Seawater Intrusion	0	0	0	0	0	0
Recycled Water	None	0	0	0	0	0	0
Notes:							
1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.							
2. The impact of seawater intrusion on fresh groundwater supplies may be mitigated by the continued responsible management of groundwater resources. Due to the surface water supply plans of the City, it is anticipated that the threat of seawater intrusion in the future will be minimized.							

## 5.4 DROUGHT PLANNING

The UWMPA requires that an UWMP include water supply and demand projections for normal, single-dry year, and multiple-dry years.

### Law

*10631 (c) (1). Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following: (A) an average water year, (B) a single dry water year, (C) multiple dry water years.*

*10632 (b). (Provide) an estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.*

*10635 (a). Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.*

This section considers the City's water supply reliability during three climate-related water scenarios: normal water year, single dry water year, and multiple dry water years. These scenarios are defined by DWR as follows:

- **Normal Year:** The normal year is a year or an averaged range of years in the historical sequence that most closely represents median runoff levels and patterns. It is defined as the median runoff over the previous 30 years or more.
- **Single Dry Year:** This is defined as the year with the minimum useable supply. The supply quantities for this condition are derived from the minimum historical annual yield.
- **Multiple Dry Years:** This is defined as the three (or more) consecutive years with the minimum useable supply. Water systems are more vulnerable to these droughts of long duration, because they deplete water storage reserves in local and state reservoirs and in groundwater basins. The supply quantities for this condition are derived from the minimum of historical three-year running average yields.

#### 5.4.1 Basis of Water Year Data

Historical rainfall data available for San Luis Obispo were examined to establish a basis of water year for normal, single dry, and multiple dry years. As shown in Table 5.7, for the purposes of this report, the year 1991 is classified as a “normal” year, the year 1989 is classified as a “single dry” year, and the years 1969 to 1971 are classified as “multiple dry” years.

<b>Table 5.7 Basis of Water Year Data (Guidebook Table 27) 2005 Urban Water Management Plan City of Pismo Beach</b>	
<b>Water Year Type</b>	<b>Base Year(s)</b>
Average Water Year	1991
Single Dry Water Year	1989
Multiple Dry Water Years	1969-1971

#### 5.4.2 Supply Reliability - Historic and Current Conditions

The relative reduction in available supplies during dry water years is variable, and depends on the projected reductions from each specific water source.

##### 5.4.2.1 State Water Project

For the SWP, DWR periodically compiles a report on the supply reliability of State Water under current and projected future water conditions. DWR's 2009 Delivery Reliability Report describes the historical and projected deliveries that will be made to the SLOFCWCD during normal years and over various drought-year periods. Although the relative percent deliveries included in the 2009 Delivery Reliability Report apply specifically to SLOFCWCD allocations, these percentages correspond to percent reduction that the City may experience in drought conditions as well. In a correspondence letter from the CCWA to the

County (Appendix P), the CCWA provided the County with estimated reductions in SWP supplies based on the DWR 2009 Reliability Report. Percent reductions for a three-year drought period were calculated using a similar method to that used by CCWA, and applied in Table 5.9 through Table 5.12, below. Single dry year deliveries in State Water supply range from 6 to 11 percent through 2035, while deliveries were estimated to be 24 percent for each year during a multiple dry year period.

To protect against reductions in SWP supply, the City has requested from the County a total of 2,740 AFY to serve as drought buffer, wherein the City “buys in” to emergency State Water allocations for an annual fee. The presence of the drought buffer provides security for the City’s surface water supplies. In fact, with a future contracted deliverable supply of 1,740 AFY and a drought buffer of 2,740 AFY, the City would receive its full allocation of deliverable supply even when State Water deliveries are reduced by over 60 percent. While greater reductions in SWP supply may occur during extremely dry years, the City’s drought buffer will ensure that the City receives a reliable volume that may be supplemented with other supply sources.

#### **5.4.2.2 Lopez Project**

The supply reliability of the City’s surface water allocation from the Lopez Project is determined by the SLOFCWCD and based on historical production and delivery volumes in normal, single dry year, and multiple dry year conditions. According to the County’s 2010 UWMP, the Lopez Reservoir is a very reliable source of water. The annual safe yield of the reservoir is 8,730, which is 4,200 AFY greater than the entitlements currently held by contracted agencies such as the City. The County projects that entitlements will remain constant at 4,530 AFY through 2030, and that it will be able to supply all contracted agencies with their requested allocations in full during single dry years and multiple dry years. Therefore, it is assumed that water supply from the Lopez Reservoir during dry water years will meet the City’s full allocation of 896 AFY.

#### **5.4.2.3 Groundwater**

The reliability of the City’s groundwater source is simplified by the fact that the subbasin from which the municipal wells draw groundwater is adjudicated. The adjudication judgment (Appendix K) states that the Northern Cities (Pismo Beach included) have a paramount right to withdraw 7,300 AF from the Northern Cities Area of the Basin. The City is entitled to 700 AF of this total, as indicated in the City’s Gentlemen’s Agreement with other water purveyors in the Northern Cities Area (Appendix J; described in detail in Chapter 4 of this UWMP). The judgment also states that the court may exercise its equity powers in the condition that the Basin becomes over drafted. However, there is no current language in the adjudication judgment that stipulates the amount that supply allocations may be reduced. Therefore, for planning purposes, it will be assumed that the City may have its full allocation of groundwater available even in dry water years.

However, it is important to note that the City has made and continues to make planning efforts to reduce its reliance on groundwater supplies. The City has requested an additional allotment of State Water, additional drought buffer from the SWP, and intends to develop an extensive recycled water program (described in Chapter 4). In addition, with recent detections of groundwater elevations below sea level and subsequent threat of seawater intrusion, the City realizes the importance of maintaining its groundwater supplies and following a sustainable pumping plan. The period of time between 2008 and 2010 is indicative of the City's response to decreased and unsafe groundwater levels; the City reduced its groundwater production by over 84 percent during that time. Therefore, the City considers and will continue to consider minimizing its impact to groundwater resources, especially during dry years or drought conditions.

During single- or multiple-dry year events when recharge to groundwater aquifers may be decreased, the City intends to utilize its planned Groundwater Recharge and Recovery Program (GRRP) to ensure groundwater supply. The GRRP will be a year-round effort by the City, and will be supplied with recycled water from the City's wastewater treatment plant. Since the flow of wastewater is typically reliable even during dry years, the City anticipates that it will be able to provide significant enhancement of groundwater supplies and protect groundwater resources when threatened by drought conditions.

Table 5.8 describes historical supply conditions during normal and dry water years. Table 5.9 describes current supply sources and expected reductions during dry years. Groundwater and Lopez Project supplies are not expected to decrease in dry years, due to the City's planned GRRP and anticipated supply availability, respectively. Surface water supply from the SWP, however, is expected to decrease based on DWR reliability projections.

<b>Table 5.8 Supply Reliability - Historical Conditions (Guidebook Table 28)</b> <b>2005 Urban Water Management Plan</b> <b>City of Pismo Beach</b>					
Supply Source	Average/ Normal Year (1991) <sup>(2)</sup>	Single Dry Year (1989)	Multiple Dry Years		
			1969	1970	1971
Groundwater	700	700	700	700	700
State Water Project <sup>(3)</sup>	1,240	868	1,240	955	682
Lopez Reservoir	896	896	896	896	896
<b>Percent of Normal</b>		<b>87%</b>	<b>100%</b>	<b>90%</b>	<b>80%</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. Normal year supplies are based on current 2010 supplies. 3. Percent reductions of State Water Project supplies during dry years are based on actual percent reductions in deliveries for the reference dry years, published by DWR within its 2009 Delivery Reliability Report. However, dry year reductions are based on DWR historical reliability data for the County allocation of State Water. The percent reductions applied to the County for these years does not necessary mean that the supplies for the City were reduced equivalently. Equivalent reductions in supply were assumed to populate this table.					

<b>Table 5.9 Supply Reliability - Current Water Sources (Guidebook Table 31)</b> <b>2005 Urban Water Management Plan</b> <b>City of Pismo Beach</b>					
Supply Source <sup>(2)</sup>	Water Use (AFY)				
	Average/ Normal Year <sup>(2)</sup>	Single Dry Year	Multiple Dry Years		
			Year 1	Year 2	Year 3
Groundwater	700	700	700	700	700
State Water Project <sup>(3)</sup>	1,240	149	595	595	595
Lopez Reservoir	896	896	896	896	896
<b>Percent of Normal</b>		<b>62%</b>	<b>77%</b>	<b>77%</b>	<b>77%</b>
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. Does not include recycled water because recycled water is not currently used or produced by the City. 3. Percent reductions in State Water Project supplies are based on a single dry year delivery and multiple dry year annual delivery of 6 and 24 percent, respectively, of allocated supplies (based off the DWR 2009 Delivery Reliability Report). The City's anticipated allocation of drought buffer (1,240 AFY) supplies is included in these dry year values.					

### 5.4.3 Projected Normal Year Supply/Demand

The normal year water demands through 2035 are estimated based on the per capita water use targets summarized in Chapter 3 and populations presented in Chapter 2, in addition to the Price Canyon irrigation demand. The projected normal water year water supply and demand projections are provided in Table 5.10. The available supplies during a normal year represent 100 percent of the available supplies discussed in Chapter 4.

<b>Table 5.10 Supply and Demand Comparison - Normal Year (Guidebook Table 32) 2005 Urban Water Management Plan City of Pismo Beach</b>					
<b>Supply/Demand Condition</b>	<b>Projected Supply/Demand (AFY)</b>				
	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>
Supply Totals (from Guidebook Table 16) <sup>(2)</sup>	4,757	4,894	5,034	5,176	5,321
Demand Totals (from Guidebook Table 11)	2,036	2,002	2,182	2,364	2,550
Supply and Demand Difference	2,721	2,892	2,852	2,812	2,771
Difference as Percent of Supply	57%	59%	57%	54%	52%
Difference as Percent of Demand	134%	144%	131%	119%	109%
<b>Notes:</b>					
1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR.					
2. Includes recycled water.					

### 5.4.4 Projected Single Dry Year Supply/Demand

The projected single dry year water demands through 2035 are equivalent to normal year demands, assuming that water demands do not change as a result of dry conditions. The anticipated supply decrease during a single dry year, compared to a normal year, is based on the SWP supply reductions estimated by the CCWA (Appendix P). As shown in Table 5.11, the City's supplies are consistently above projected demands even during single-dry year conditions.

<b>Table 5.11     Supply and Demand Comparison - Single Dry Year (Guidebook Table 33)</b> <b>2005 Urban Water Management Plan</b> <b>City of Pismo Beach</b>					
Supply/Demand Condition	Projected Supply/Demand (AFY)				
	2015	2020	2025	2030	2035
Supply Totals (from Guidebook Table 16) <sup>(2), (3)</sup>	3,330	3,513	3,697	3,884	4,074
Demand totals (from Guidebook Table 11)	2,036	2,002	2,182	2,364	2,550
Supply and Demand Difference	1,295	1,511	1,515	1,520	1,523
Difference as Percent of Supply	39%	43%	41%	39%	37%
Difference as Percent of Demand	64%	75%	69%	64%	60%
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. Percent reductions in State Water Project supplies are based on a single dry year deliveries from 2015 to 2035 of 7, 8, 9, 10, and 11 percent, respectively, of allocated supplies (based off the DWR 2009 Delivery Reliability Report and CCWA prediction in Appendix P). The City's anticipated allocation of drought buffer (2,740 AFY) supplies is included in these dry year values. 3. Includes recycled water.					

#### 5.4.5 Projected Multiple Dry Year Supply/Demand

The projected multiple dry year water demands through 2035 are equivalent to normal year demands, assuming that water demands do not change as a result of dry conditions. The anticipated supply decrease during a multiple dry years, compared to a normal year, is based on the SWP supply reductions provided in DWR's 2009 Delivery Reliability Report for the County SWP contract. The method of calculating the 3-year supply reduction is the same as the methods used by CCWA in its SWP reliability estimate to the County (Appendix P). As shown in Table 5.12, the City's supplies are consistently above projected demands even during multiple-dry year conditions.

<b>Table 5.12    Supply and Demand Comparison - Multiple Dry Year Events (Guidebook Table 34)</b> <b>2005 Urban Water Management Plan</b> <b>City of Pismo Beach</b>					
Supply/Demand Condition	Projected Supply/Demand (AFY)				
	2015	2020	2025	2030	2035
<b>Year 1</b>					
Supply Totals <sup>(2),(3)</sup>	3,626	3,791	3,958	4,128	4,300
Demand Totals	2,036	2,002	2,182	2,364	2,550
Supply and Demand Difference	1,591	1,789	1,776	1,763	1,750
Difference as Percent of Supply	44%	47%	45%	43%	41%
Difference as Percent of Demand	78%	89%	81%	75%	69%
<b>Year 2</b>					
Supply Totals <sup>(2),(3)</sup>	3,626	3,791	3,958	4,128	4,300
Demand Totals	2,036	2,002	2,182	2,364	2,550
Supply and Demand Difference	1,591	1,789	1,776	1,763	1,750
Difference as Percent of Supply	44%	47%	45%	43%	41%
Difference as Percent of Demand	78%	89%	81%	75%	69%
<b>Year 3</b>					
Supply Totals <sup>(2),(3)</sup>	3,626	3,791	3,958	4,128	4,300
Demand Totals	2,036	2,002	2,182	2,364	2,550
Supply and Demand Difference	1,591	1,789	1,776	1,763	1,750
Difference as Percent of Supply	44%	47%	45%	43%	41%
Difference as Percent of Demand	78%	89%	81%	75%	69%
<b>Notes:</b> 1. "Guidebook Table X" refers to a specific table in the "Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan" by DWR. 2. Percent reductions in State Water Project supplies are based on a multiple dry year deliveries of 24 percent of allocated supplies (based off the DWR 2009 Delivery Reliability Report and CCWA prediction in Appendix P). The City's anticipated allocation of drought buffer (2,740 AFY) supplies is included in these dry year values. 3. Includes recycled water.					

## DEMAND MANAGEMENT MEASURES

The Urban Water Management Planning Act (UWMPA) identifies 14 Demand Management Measures (DMMs) for urban water suppliers to address. These measures are derived from the original Best Management Practices (BMPs) established in the UWMPA and the 1991 Memorandum of Understanding (MOU).

### Law

*10631 (f) (1) and (2). (Describe and provide a schedule of implementation for) each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following: (A) water survey programs for single-family residential and multifamily residential customers; (B) residential plumbing retrofit; (C) system water audits, leak detection, and repair; (D) metering with commodity rates for all new connections and retrofit of existing connections; (E) large landscape conservation programs and incentives; (F) high-efficiency washing machine rebate programs; (G) public information programs; (H) school education programs; (I) conservation programs for commercial, industrial, and institutional accounts; (J) wholesale agency programs; (K) conservation pricing; (L) water conservation coordinator; (M) water waste prohibition; (N) residential ultra-low flush toilet replacement programs.*

*10631 (f) (3). (Provide) a description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.*

*10631 (f) (4). (Provide) an estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand.*

*10631 (g). (Provide) an evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following: (1) Take into account economic and noneconomic factors, including environmental, social, health, customer impact, and technological factors; (2) Include a cost-benefit analysis, identifying total benefits and total costs; (3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost; (4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation.*

In 1991 (amended September 16, 1999), an MOU regarding urban water conservation in California was made that formalizes an agreement between Department of Water Resources (DWR), water utilities, environmental organizations, and other interested groups to implement DMMs and make a cooperative effort to reduce the consumption of California's water resources. This MOU is administered by the California Urban Water Conservation Council (CUWCC). The City of Pismo Beach (City) is currently a signatory of the MOU and is a member of the CUWCC.

The City realizes the importance of the BMPs to ensure a reliable future water supply. The City is committed to implementing water conservation and water recycling programs to maximize sustainability in meeting future water needs for its customers. Further discussion of the City's water conservation activities is included in the City's CUWCC BMP Annual Reports (Appendix Q). Due to the continued effective water conservation measures implemented by the City, the 2010 per-capita water use has dropped to roughly 226 gallons per capita per day (gpcd) from 256 gpcd in 2007. The DMMs described hereafter fall into one of four categories indicated in Table 6.1.

## **6.1 DMM 1 - WATER SURVEY PROGRAMS FOR SINGLE-FAMILY RESIDENTIAL AND MULTI-FAMILY RESIDENTIAL CUSTOMERS**

This program consists of offering water audits to single-family and multi-family residential customers. Audit components include reviewing water usage history with the customer, identifying leaks inside and outside the home, and recommending improvements.

Although the City does not have a formal residential survey program, the City has completed measures on a residential level that reduce water consumption. The City estimates that 90 percent of residential units were equipped with water conservation fixtures. In addition, in the late 1980s and early 1990s, the City council adopted resolutions and ordinances that required retrofitting with water conserving fixtures in order to obtain a building permit. The relatively high percent of residential upgrades that occur annually in the area result in the increased use of modern, water-conserving fixtures.

## **6.2 DMM 2 - RESIDENTIAL PLUMBING RETROFIT**

This program consists of installing physical devices to reduce the amount of water used or to limit the amount of water, which can be served to the customer. This includes working with local programs and businesses to offer free water conservation information and materials to residents. In accordance with State Law, low-flow fixtures have been required on all new construction since 1978. In addition, State legislation enacted in 1990 requires all new buildings after January 1, 1992 to install Ultra Low Flush Toilets (ULFT).

Several studies suggest that savings resulting from miscellaneous interior retrofit fixtures can range between 25 and 65 gpd per housing unit. The studies also suggest that installation of retrofit fixtures in older single-family homes tend to produce more savings, while newer multi-family homes tend to produce fewer saving per housing unit.

The City required plumbing retrofits in the 1980s and 1990s for all new building permits. During this time, the City was extensively surveyed and retrofitted. Current building codes also require water saving fixtures to be utilized. As such, most old and all new residences are considered to be retrofitted with water conserving fixtures.

**Table 6.1 Demand Management Measures  
2005 Urban Water Management Plan  
City of Pismo Beach**

<b>Demand Management Measure</b>	<b>Implemented</b>	<b>“As Least Effective As” Coverage Status<sup>(1)</sup></b>	<b>Not Implemented<sup>(2)</sup></b>	<b>Not Applicable</b>
BMP 1 - Water Survey Programs		☑		
BMP 2 - Residential Plumbing Retrofit		☑		
BMP 3 - Water System Audits		☑		
BMP 4 - Metering with Commodity Rates	☑			
BMP 5 - Landscape Irrigation Programs		☑		
BMP 6 - Washing Machine Rebate Program			☑	
BMP 7 - Public Information			☑	
BMP 8 - School Education			☑	
BMP 9 - Commercial, Industrial & Institutional Programs			☑	
BMP 10 - Wholesale Agency Programs				☑
BMP 11 - Conservation Pricing	☑			
BMP 12 - Water Conservation Coordinator		☑		
BMP 13 - Water Waste Prohibition			☑	
BMP 14 - Ultra Low Flush Toilet Replacement	☑			

**Notes:**

1. As a part of the CUWCC BMP Annual Report, the City has the opportunity to label a BMP “as least as effective as” the BMP as described by the CUWCC. Therefore, while the City may not have a formal program exactly as specified by the CUWCC, a BMP may still be considered fulfilled through other water conservation activities.
2. A status of “not implemented” indicates that, based on the City’s CUWCC 2008 Annual Report, that the City does not currently meet the coverage requirements for this BMP.

### **6.3 DMM 3 - SYSTEM WATER AUDITS, LEAK DETECTION, AND REPAIR**

A water audit is a process of accounting for water use throughout a water system in order to quantify the unaccounted-for water. Unaccounted-for water is the difference between metered production and metered consumption on a system-wide basis. A leak detection program typically consists of both visual inspection as well as audible inspection. Visual inspection includes the inspection of distribution system appurtenances (e.g., fire hydrants, valves, meters, etc.) to identify obvious signs of leakage. To perform audible leak detection, specialized electronic listening equipment is used to detect the sounds associated with distribution system leakage. This process allows the agency to pinpoint the location of suspected leaks.

The City maintains records of its water production and metered deliveries, and can subsequently identify percent losses within the distribution system. System losses are typically less than eight percent.

### **6.4 DMM 4 - METERING WITH COMMODITY RATES FOR ALL NEW CONNECTIONS AND RETROFIT OF EXISTING CONNECTIONS**

This DMM requires water meters for all new construction and billing by volume of use, as well as establishing a program for retrofitting any existing unmetered connections.

All of the City's service connections are metered and billed based on volume of use. Meter retrofits are performed on an as-needed basis.

### **6.5 DMM 5 - LARGE LANDSCAPE CONSERVATION PROGRAMS AND INCENTIVES**

This DMM calls for agencies to commence assigning reference evapotranspiration (ET<sub>o</sub>) based water budgets to accounts with dedicated irrigation meters and provide water-use large landscape water audits to commercial, industrial, and institutional (CII) customers with mixed-use meters.

This DMM is not currently being implemented by the City. However, the City has implemented mandatory water-efficient landscape standards and requirements as a part of the Municipal Code (§15.48). Included in the requirements is the submittal of a landscape documentation package, making water efficiency, and conservation a key factor in approval of landscaping projects in the City.

## **6.6 DMM 6 - HIGH-EFFICIENCY WASHING MACHINE REBATE PROGRAM**

This program generally provides a financial incentive (rebate offer) to qualifying customers who install a high efficiency washing machine in their home. This DMM is not currently being implemented by the City.

## **6.7 DMM 7 - PUBLIC INFORMATION PROGRAMS**

This program consists of distributing information to the public through a variety of methods including brochures, radio and television, school presentations and videos, and web sites.

This DMM is not currently being implemented by the City. However, the City provides year-to-year water usage comparison in its bills to customers, and periodically includes a brochure insert that details water conservation actions and instructions on how to read water meters.

## **6.8 DMM 8 - SCHOOL EDUCATION PROGRAM**

This DMM requires water supplier to implement a school education program that includes providing educational materials and instructional assistance. This DMM is not currently being implemented by the City.

## **6.9 DMM 9 - CONSERVATION PROGRAMS FOR COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL ACCOUNTS**

The City maintains a conservation program for its commercial and institutional customers (the City has no industrial accounts). This DMM is not currently being implemented by the City. However, starting in 2008, the budget for CII expenditures related to the conservation program was \$6,500. The City provides information to CII customers, as appropriate, on water conservation opportunities and meter reading.

## **6.10 DMM 10 - WHOLESALE AGENCY PROGRAMS**

This DMM applies to wholesale agencies and defines a wholesaler's role in terms of financial, technical, and programmatic assistance to its retail agencies implementing DMMs. The City is not a wholesale agency, so this DMM does not apply.

## **6.11 DMM 11 - CONSERVATION PRICING**

Conservation pricing is designed to discourage wasteful water habits and encourage conservation. The City applies variable water service rate structures by customer class.

Rates based on volume of use encourage water conservation by customers. The City's 2010 to 2011 water and sewer rate structure is included as Appendix R.

## **6.12 DMM 12 - WATER CONSERVATION COORDINATOR**

A conservation coordinator is an ongoing component of a City's water conservation program. The conservation coordinator is responsible for implementing and monitoring the City's water conservation activities.

Several of the City's departments help coordinate the water conservation program. The City currently has \$6,500 budgeted towards meeting BMP requirements as indicated by the CUWCC.

## **6.13 DMM 13 - WATER WASTE PROHIBITION**

Water waste prohibition will require the City to adopt its own set of water conservation regulations. While the City has not adopted an ordinance specifically on the prohibition of water waste, the City has incorporated other water conservation measures into its Municipal Code. For example, the City implemented a water conservation ordinance in 2000 that prohibited the waste of water through prohibition of the following activities:

- Outdoor irrigation resulting in excessive gutter runoff,
- Outdoor use for washing vehicles, boats, paved surfaces, buildings, and other uses without hand-controlled devices,
- Restaurants serving water to customers unless specifically requested by the customer,
- Outdoor irrigation during the hours of 10 AM and 4 PM.

The City may make other mandatory prohibitions of wasteful water use when appropriate.

## **6.14 DMM 14 - RESIDENTIAL ULTRA LOW FLUSH TOILET REPLACEMENT PROGRAMS**

State legislation requires the installation of efficient plumbing in new construction, and, effective in 1994, requires that only ULFTs be sold in California. ULFTs include toilets that use 1.6 gallons per flush or less.

The City estimates that approximately 90 percent of residences are equipped with water conserving fixtures. In the 1980s and 1990s, the City Council adopted resolutions and ordinances that required retrofitting with water conserving fixtures for all building permits. The relatively high rate of residential retrofits that take place in the City lead to continual upgrade and installation of water conserving fixtures, including ULFTs.

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**COMPLETED UWMP CHECKLIST****7.1 UWMP CHECKLIST**

In order to expedite the review of the 2010 Urban Water Management Plans (UWMPs), the California Department of Water Resources (DWR) has developed a “Completed UWMP Checklist” that may be completed by urban water suppliers and included in their UWMPs. DWR offers two separate checklists with identical content, but which are organized differently. One version of the checklist is organized according to the Water Code legislative order. The other checklist is organized by topic, similar to the organization of DWR’s Guidebook to Assist Urban Water Suppliers to Prepare a 2010 UWMP. Because the City of Pismo Beach’s (City’s) 2010 UWMP is organized according to the recommended guidebook format, the completed UWMP checklist (Table 7.1) presented on the following pages is organized by topic. Values in *blue italics* represent values input for the City’s 2010 UWMP in the standardized DWR table.

<b>Table 7.1 Completed UWMP Checklist, Organized by Topic</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>				
<b>No.</b>	<b>UWMP Requirement <sup>(1),(2)</sup></b>	<b>Calif. Water Code Reference</b>	<b>Additional Clarification</b>	<b>UWMP Location</b>
<b>PLAN PREPARATION</b>				
4	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	10620(d)(2)		<a href="#">Ch. 1, Sec. 1.3 (pg. 1-3) &amp; Table 1.1</a>
6	Notify, at least 60 days prior to the public hearing on the plan required by Section 10642, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. Any city or county receiving the notice may be consulted and provide comments.	10621(b)		<a href="#">Ch 1, Sec 1.3 (pg. 1)</a>
7	Provide supporting documentation that the UWMP or any amendments to, or changes in, have been adopted as described in Section 10640 et seq.	10621(c)		<a href="#">Ch. 1, Sec. 1.4.1 (pg. 1-6) &amp; App. C</a>
54	Provide supporting documentation that the urban water management plan has been or will be provided to any city or county within which it provides water, no later than 60 days after the submission of this urban water management plan.	10635(b)		<a href="#">Ch. 1, Sec. 1.3. (pg. 1) &amp; App. D</a>
55	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.	10642		<a href="#">Ch. 1, Sec. 1.3 (pg. 1-3) &amp; Table 1.1</a>
56	Provide supporting documentation that the urban water supplier made the plan available for public inspection and held a public hearing about the plan. For public agencies, the hearing notice is to be provided pursuant to Section 6066 of the Government Code. The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water. Privately-owned water suppliers shall provide an equivalent notice within its service area.	10642		<a href="#">Ch. 1, Sec. 1.3 (pg. 1-5) &amp; App. B</a>
57	Provide supporting documentation that the plan has been adopted as prepared or modified.	10642		<a href="#">Ch. 1, Sec. 1.4.1 (pg. 1-6) &amp; App. C</a>
58	Provide supporting documentation as to how the water supplier plans to implement its plan.	10643		<a href="#">Ch. 1, Sec. 1.4.3 (pg. 1-7)</a>

<b>Table 7.1 Completed UWMP Checklist, Organized by Topic</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>				
<b>No.</b>	<b>UWMP Requirement <sup>(1),(2)</sup></b>	<b>Calif. Water Code Reference</b>	<b>Additional Clarification</b>	<b>UWMP Location</b>
59	Provide supporting documentation that, in addition to submittal to DWR, the urban water supplier has submitted this UWMP to the California State Library and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. This also includes amendments or changes.	10644(a)		<a href="#">Ch. 1, Sec. 1.4.2 (pg. 1-6) &amp; App. D</a>
60	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the urban water supplier has or will make the plan available for public review during normal business hours	10645		<a href="#">Ch. 1, Sec. 1.3 (pg. 1-5)</a>
<b>SYSTEM DESCRIPTION</b>				
8	Describe the water supplier service area.	10631(a)		<a href="#">Ch. 2, Sec. 2.1 &amp; 2.2 (pg. 2-1 to 2-9)</a>
9	Describe the climate and other demographic factors of the service area of the supplier	10631(a)		<a href="#">Ch. 2, Sec. 2.1.3 &amp; Sec. 2.2 (pg. 2-6 to 2-9)</a>
10	Indicate the current population of the service area	10631(a)		<a href="#">Ch. 2, Sec. 2.2 (pg. 2-7)</a>
11	Provide population projections for 2015, 2020, 2025, and 2030, based on data from State, regional, or local service area population projections.	10631(a)		<a href="#">Ch. 2, Sec. 2.2 (pg. 2-9)</a>
12	Describe other demographic factors affecting the supplier's water management planning.	10631(a)		<a href="#">Ch. 2, Sec. 2.3 (pg. 2-9)</a>
<b>SYSTEM DEMANDS</b>				
1	Provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	10608.20(e)		<a href="#">Ch. 3, Sec. 3.1 (pg. 3-1 to 3-10)</a>
2	<i>Wholesalers:</i> Include an assessment of present and proposed future measures, programs, and policies to help achieve the water use reductions. <i>Retailers:</i> Conduct at least one public hearing that includes general discussion of the urban retail water supplier's implementation plan for complying with the Water Conservation Bill of 2009.	10608.36 10608.26(a)		<a href="#">Ch. 3, Sec. 3.3 (pg. 3-22 to 3-24)</a>

<b>Table 7.1 Completed UWMP Checklist, Organized by Topic</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>				
<b>No.</b>	<b>UWMP Requirement <sup>(1),(2)</sup></b>	<b>Calif. Water Code Reference</b>	<b>Additional Clarification</b>	<b>UWMP Location</b>
3	Report progress in meeting urban water use targets using the standardized form.	10608.40		<i>Not Applicable until 2015 UWMP</i>
25	Quantify past, current, and projected water use, identifying the uses among water use sectors, for the following: (A) single-family residential, (B) multifamily, (C) commercial, (D) industrial, (E) institutional and governmental, (F) landscape, (G) sales to other agencies, (H) saline water intrusion barriers, groundwater recharge, conjunctive use, and (I) agriculture.	10631(e)(1)		<i>Ch. 3, Sec 3.2 (pg. 3-10 to 3-22)</i>
33	Provide documentation that either the retail agency provided the wholesale agency with water use projections for at least 20 years, if the UWMP agency is a retail agency, OR, if a wholesale agency, it provided its urban retail customers with future planned and existing water source available to it from the wholesale agency during the required water-year types	10631(k)		<i>Appendix P</i>
34	Include projected water use for single-family and multifamily residential housing needed for lower income households, as identified in the housing element of any city, county, or city and county in the service area of the supplier.	10631.1(a)		<i>Ch. 3, Sec. 3.2.5 (pg. 3-21)</i>
13	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, and 2030.	10631(b)		<i>Ch. 4, Section 4.1.3 to 4.1.4 (pg. 4-3 to 4-7)</i>
14	Indicate whether groundwater is an existing or planned source of water available to the supplier. If yes, then complete 15 through 21 of the UWMP Checklist. If no, then indicate "not applicable" in lines 15 through 21 under the UWMP location column.	10631(b)		<i>Ch. 4, Sec. 4.1.1 (pg. 4-2) &amp; Sec. 4.2 (pg. 4-7 to 4-11)</i>
15	Indicate whether a groundwater management plan been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	10631(b)(1)		<i>Ch. 4, Sec. 4.2.2 (pg. 4-8)</i>
16	Describe the groundwater basin.	10631(b)(2)		<i>Ch. 4, Sec. 4.2.1 (pg. 4-7)</i>

<b>Table 7.1 Completed UWMP Checklist, Organized by Topic</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>				
<b>No.</b>	<b>UWMP Requirement <sup>(1),(2)</sup></b>	<b>Calif. Water Code Reference</b>	<b>Additional Clarification</b>	<b>UWMP Location</b>
17	Indicate whether the groundwater basin is adjudicated? Include a copy of the court order or decree.	10631(b)(2)		<a href="#">Ch. 4, Sec. 4.2.1 (pg. 4-7)</a>
18	Describe the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. If the basin is not adjudicated, indicate "not applicable" in the UWMP location column.	10631(b)(2)		<a href="#">Ch. 4, Sec. 4.1.3 (pg. 4-3)</a>
19	For groundwater basins that are not adjudicated, provide information as to whether DWR has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition. If the basin is adjudicated, indicate "not applicable" in the UWMP location column.	10631(b)(2)		<a href="#">Ch. 4, Sec. 4.2.4 (pg. 4-10)</a>
20	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	10631(b)(3)		<a href="#">Ch. 4, Sec. 4.3 (pg. 4-11 to 4-13)</a>
21	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	10631(b)(4)		<a href="#">Ch. 4, Sec. 4.3 (pg. 4-11 to 4-13)</a>
24	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	10631(d)		<a href="#">Ch. 4, Sec. 4.4 (pg. 4-12)</a>
30	Include a detailed description of all water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and multiple-dry years, excluding demand management programs addressed in (f)(1). Include specific projects, describe water supply impacts, and provide a timeline for each project.	10631(h)		<a href="#">Ch. 4, Sec. 4.7 (pg. 4-23)</a>
31	Describe desalinated water project opportunities for long-term supply, including, but not limited to, ocean water, brackish water, and groundwater.	10631(i)		<a href="#">Ch. 4, Sec. 4.5 (pg. 4-13)</a>
44	Provide information on recycled water and its potential for use as a water source in the service area of the urban water supplier. Coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	10633		<a href="#">Ch. 4, Sec. 4.6 (pg. 4-13 to 4-23)</a>

<b>Table 7.1 Completed UWMP Checklist, Organized by Topic</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>				
<b>No.</b>	<b>UWMP Requirement <sup>(1),(2)</sup></b>	<b>Calif. Water Code Reference</b>	<b>Additional Clarification</b>	<b>UWMP Location</b>
45	Describe the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	10633(a)		<a href="#">Ch. 4, Sec. 4.6.1 to 4.6.3 (pg. 4-14 to 4-17)</a>
46	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	10633(b)		<a href="#">Ch. 4, Sec. 4.6.3 (pg. 4-16)</a>
47	Describe the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.	10633(c)		<a href="#">Ch. 4, Sec. 4.6.4 (pg. 4-17)</a>
48	Describe and quantify the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.	10633(d)		<a href="#">Ch. 4, Sec. 4.6.5 (pg. 4-19)</a>
49	The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	10633(e)		<a href="#">Ch. 4, Sec. 4.6.5 (pg. 4-19)</a>
50	Describe the actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.	10633(f)		<a href="#">Ch. 4, Sec. 4.6.7 (pg. 4-22)</a>
51	Provide a plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.	10633(g)		<a href="#">Ch. 4, Sec. 4.6.8 (pg. 4-23)</a>
<b>WATER SHORTAGE RELIABILITY AND WATER SHORTAGE CONTINGENCY PLANNING</b>				
5	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	10620(f)		<a href="#">Ch. 5, Sec. 5.1.1 (pg. 5-1)</a>
22	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage and provide data for (A) an average water year, (B) a single dry water year, and (C) multiple dry water years.	10631(c)(1)		<a href="#">Ch. 5, Sec. 5-4 (pg. 5-16 to 5-23)</a>

<b>Table 7.1 Completed UWMP Checklist, Organized by Topic</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>				
<b>No.</b>	<b>UWMP Requirement <sup>(1),(2)</sup></b>	<b>Calif. Water Code Reference</b>	<b>Additional Clarification</b>	<b>UWMP Location</b>
23	For any water source that may not be available at a consistent level of use - given specific legal, environmental, water quality, or climatic factors - describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.	10631(c)(2)		<a href="#">Ch. 5, Sec. 5.1.2 (pg. 5-2 to 5-5)</a>
35	Provide an urban water shortage contingency analysis that specifies stages of action, including up to a 50-percent water supply reduction, and an outline of specific water supply conditions at each stage	10632(a)		<a href="#">Ch. 5, Sec. 5.2.1 (pg. 5-7)</a>
36	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.	10632(b)		<a href="#">Ch. 5, Sec. 5.4.2. (pg. 5-17 to 5-21)</a>
37	Identify actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.	10632(c)		<a href="#">Ch. 5, Sec. 5.2.2 (pg. 5-10)</a>
38	Identify additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.	10632(d)		<a href="#">Ch. 5, Sec. 5.2.3 &amp; 5.2.4 (pg. 5-11 to 5-12)</a>
39	Specify consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.	10632(e)		<a href="#">Ch. 5, Sec. 5.2.4 (pg. 5-11)</a>
40	Indicated penalties or charges for excessive use, where applicable.	10632(f)		<a href="#">Ch. 5, Sec. 5.2.5 (pg. 5-12)</a>
41	Provide an analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.	10632(g)		<a href="#">Ch. 5, Sec. 5.2.6 (pg. 5-12)</a>

<b>Table 7.1 Completed UWMP Checklist, Organized by Topic</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>				
<b>No.</b>	<b>UWMP Requirement <sup>(1),(2)</sup></b>	<b>Calif. Water Code Reference</b>	<b>Additional Clarification</b>	<b>UWMP Location</b>
42	Provide a draft water shortage contingency resolution or ordinance.	10632(h)		<a href="#">Ch. 5, Sec. 5.2.7 (pg. 5-13) &amp; App. M</a>
43	Indicate a mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.	10632(i)		<a href="#">Ch. 5, Sec. 5.2.8 (pg. 5-13)</a>
52	Provide information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments, and the manner in which water quality affects water management strategies and supply reliability	10634		<a href="#">Ch. 5, Sec. 5.3 (pg. 5-14 to 5-16)</a>
53	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. Base the assessment on the information compiled under Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.	10635(a)		<a href="#">Ch. 5, Sec. 5.4.3 to 5.4.5 (pg. 5-21 to 5-23)</a>
<b>DEMAND MANAGEMENT MEASURES</b>				
26	Describe how each water demand management measures is being implemented or scheduled for implementation. Use the list provided.	10631(f)(1)		<a href="#">Ch. 6, Sec. 6.1 to 6.14 (pg. 6-1 to 6-6)</a>
27	Describe the methods the supplier uses to evaluate the effectiveness of DMMs implemented or described in the UWMP.	10631(f)(3)		<a href="#">Ch. 6, Sec. 6.1 to 6.14 (pg. 6-1 to 6-6)</a>
28	Provide an estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the ability to further reduce demand.	10631(f)(4)		<a href="#">Ch. 6, Sec. 6.1 to 6.14 (pg. 6-1 to 6-6)</a>
29	Evaluate each water demand management measure that is not currently being implemented or scheduled for implementation. The evaluation should include economic and non-economic factors, cost-benefit analysis, available funding, and the water suppliers' legal authority to implement the work.	10631(g)		<a href="#">Ch. 6, Sec. 6.1 to 6.14 (pg. 6-1 to 6-6)</a>
32	Include the annual reports submitted to meet the Section 6.2 requirements, if a member of the CUWCC and signer of the December 10, 2008 MOU.	10631(j)	Signers of the MOU that submit the annual reports are deemed compliant with Items 28 and 29.	<a href="#">Appendix Q</a>

<b>Table 7.1      Completed UWMP Checklist, Organized by Topic</b> <b>2010 Urban Water Management Plan</b> <b>City of Pismo Beach</b>				
<b>No.</b>	<b>UWMP Requirement <sup>(1),(2)</sup></b>	<b>Calif. Water Code Reference</b>	<b>Additional Clarification</b>	<b>UWMP Location</b>
<b>Notes:</b> 1. The UWMP Requirement descriptions are general summaries of what is provided in the legislation. Urban water suppliers should review the exact legislative wording prior to submitting its UWMP. 2. The Subject classification is provided for clarification only. It is aligned with the organization presented in Part I of this guidebook. A water supplier is free to address the UWMP Requirement anywhere with its UWMP, but is urged to provide clarification to DWR to facilitate review.				

## **APPENDIX A – OUTREACH DOCUMENTS AND COORDINATION WITH RELEVANT AGENCIES**



**Public Works/Engineering**

760 Mattie Road  
Pismo Beach, CA 93449  
(805) 773-4656

July 5, 2011

County of San Luis Obispo  
County Government Center  
1055 Monterey Street  
San Luis Obispo, CA 93408

Attention: Paavo Ogren, Director of Public Works

Subject: **Notice of Preparation of the 2010 City of Pismo Beach Urban Water Management Plan (UWMP)**

Dear Mr. Ogren:

Pursuant to the requirements of the California Water Code, Division 6, Part 2.6 Urban Water Management Planning, Section 10621 (b), every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days prior to the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.

This letter is intended to notify your agency that the City of Pismo Beach (City) is in process of preparing the 2010 UWMP. Based on the City's current schedule, we expect to have a public review draft of the 2010 UWMP available for review in July 2011, at which point your agency will receive a notification letter that the draft UWMP is available for public review.

If your agency would like to submit comments or provide input to the City in anticipation of the development of the 2010 UWMP, please submit written copies to:

Dwayne Chisam  
Director of Public Works  
City of Pismo Beach  
760 Mattie Road  
Pismo Beach, CA 93449

Sincerely,

CITY OF PISMO BEACH

Dwayne Chisam, P.E.  
Director of Public Works/City Engineer

cc: Tommy Greci, Carollo Engineers, Inc.



**Public Works/Engineering**  
760 Mattie Road  
Pismo Beach, CA 93449  
(805) 773-4656

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July 17, 2011

City of Arroyo Grande  
Community Development  
300 East Branch Street  
Arroyo Grande, CA 93420

Attention: Teresa McClish, Community Development Director

Subject: **Notice of Preparation of the 2010 City of Pismo Beach Urban Water Management Plan (UWMP)**

Dear Ms. McClish:

This letter is intended to notify your agency that the City of Pismo Beach (City) is in process of preparing the 2010 UWMP. Based on the City's current schedule, we expect to have a public review draft of the 2010 UWMP available in late July or early August of 2011, at which point your agency will receive a notification letter that the draft UWMP is available for public review.

If your agency would like to submit comments or provide input to the City in anticipation of the development of the 2010 UWMP, please submit written copies to:

Dwayne Chisam  
Director of Public Works  
City of Pismo Beach  
760 Mattie Road  
Pismo Beach, CA 93449

Sincerely,

CITY OF PISMO BEACH

Dwayne Chisam, P.E.  
Director of Public Works/City Engineer

cc: Tommy Greci, Carollo Engineers, Inc.

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**Public Works/Engineering**  
760 Mattie Road  
Pismo Beach, CA 93449  
(805) 773-4656

---

---

July 17, 2011

Central Coast Water Authority  
555 Industrial Way  
Buellton, CA 93427-9565

Attention: John Brady, Operations Manager/Engineer

Subject: **Notice of Preparation of the 2010 City of Pismo Beach Urban Water Management Plan (UWMP)**

Dear Mr. Brady:

This letter is intended to notify your agency that the City of Pismo Beach (City) is in process of preparing the 2010 UWMP. Based on the City's current schedule, we expect to have a public review draft of the 2010 UWMP available in late July or early August of 2011, at which point your agency will receive a notification letter that the draft UWMP is available for public review.

If your agency would like to submit comments or provide input to the City in anticipation of the development of the 2010 UWMP, please submit written copies to:

Dwayne Chisam  
Director of Public Works  
City of Pismo Beach  
760 Mattie Road  
Pismo Beach, CA 93449

Sincerely,

CITY OF PISMO BEACH

A handwritten signature in blue ink, appearing to read "D. Chisam", is written over a horizontal line.

Dwayne Chisam, P.E.  
Director of Public Works/City Engineer

cc: Tommy Greci, Carollo Engineers, Inc

---

---



**Public Works/Engineering**  
760 Mattie Road  
Pismo Beach, CA 93449  
(805) 773-4656

---

July 17, 2011

City of Grover Beach  
154 S. Eighth Street  
Grover Beach, CA 93433

Attention: Gregory Ray, Public Works Director

Subject: **Notice of Preparation of the 2010 City of Pismo Beach Urban Water Management Plan (UWMP)**

Dear Mr. Ray:

This letter is intended to notify your agency that the City of Pismo Beach (City) is in process of preparing the 2010 UWMP. Based on the City's current schedule, we expect to have a public review draft of the 2010 UWMP available in late July or early August of 2011, at which point your agency will receive a notification letter that the draft UWMP is available for public review.

If your agency would like to submit comments or provide input to the City in anticipation of the development of the 2010 UWMP, please submit written copies to:

Dwayne Chisam  
Director of Public Works  
City of Pismo Beach  
760 Mattie Road  
Pismo Beach, CA 93449

Sincerely,

CITY OF PISMO BEACH

Dwayne Chisam, P.E.  
Director of Public Works/City Engineer

cc: Tommy Greci, Carollo Engineers, Inc.

---



**Public Works/Engineering**  
760 Mattie Road  
Pismo Beach, CA 93449  
(805) 773-4656

---

July 12, 2011

Oceano Community Services District  
P.O. Box 599  
Oceano, CA 93475

Attention: Cindy Winter, Interim General Manager

Subject: **Notice of Preparation of the 2010 City of Pismo Beach Urban Water Management Plan (UWMP)**

Dear Ms. Winter:

This letter is intended to notify your agency that the City of Pismo Beach (City) is in process of preparing the 2010 UWMP. Based on the City's current schedule, we expect to have a public review draft of the 2010 UWMP available in late July or early August of 2011, at which point your agency will receive a notification letter that the draft UWMP is available for public review.

If your agency would like to submit comments or provide input to the City in anticipation of the development of the 2010 UWMP, please submit written copies to:

Dwayne Chisam  
Director of Public Works  
City of Pismo Beach  
760 Mattie Road  
Pismo Beach, CA 93449

Sincerely,

CITY OF PISMO BEACH

Dwayne Chisam, P.E.  
Director of Public Works/City Engineer

cc: Tommy Greci, Carollo Engineers, Inc.

---

**APPENDIX B – NOTICE OF PUBLIC REVIEW OF 2010 URBAN  
WATER MANAGEMENT PLAN**



**From the Office of the City Clerk**

760 Mattie Road  
Pismo Beach, CA 93449  
(805) 773-4657

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**LEGAL**

**DATE:**

September 1, 2011

**DEPT:**

Administration

**PUBLIC HEARING NOTICE**

**NOTICE IS HEREBY GIVEN** that on **Tuesday, September 20, 2011, at 6:30 p.m.**, or as soon thereafter as possible, the Pismo Beach City Council will hold a Public Hearing at 760 Mattie Road, Pismo Beach, California, in the Pismo Beach Council Chamber for the following purpose:

**2010 URBAN WATER MANAGEMENT PLAN**

All interested persons are invited to appear at this time and place specified above to give oral or written testimony in regards to this matter. Written comments may be forwarded to City Clerk's Office at 760 Mattie Road, Pismo Beach, CA 93449.



\_\_\_\_\_  
Emily Colborn, MMC  
City Clerk

*Publish: September 3, 2011 and September 10, 2011 – The Tribune*

*Posted: September 1, 2011 – City's Notice Board and Website*

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**APPENDIX C – RESOLUTION TO ADOPT THE 2010 URBAN  
WATER MANAGEMENT PLAN**

**RESOLUTION R-2011-083**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PISMO BEACH  
APPROVING THE 2010 URBAN WATER MANAGEMENT PLAN AND AUTHORIZING  
SUBMITTAL TO THE DEPARTMENT OF WATER RESOURCES**

---

**WHEREAS**, The City of Pismo Beach has prepared an Urban Water Management Plan (UWMP), in conjunction with Carollo Engineers, to satisfy the requirements of the California Water Code sections 10610 et seq. and Urban Water Management Planning Act of 1983 (UWMPA); and

**WHEREAS**, Included in the City's UWMP is long-term resource planning to ensure adequate water supplies are available to meeting existing and future demands; and

**WHEREAS**, Comparison of the City's future demands and available supplies indicates that the City will have sufficient water supply to meet its demands, even during single and multiple dry-year events; and

**WHEREAS**, Staff recommends approving the 2010 Urban Water Management plan and authorize the submittal to the Department of Water Resources.


**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Pismo Beach hereby approve the 2010 Urban Water Management Plan and authorize the submittal to the Department of Water Resources

**UPON MOTION OF** Councilmember Ehring seconded by Councilmember Waage the foregoing resolution was adopted by the City Council of the City of Pismo Beach this 20<sup>th</sup> day of September 2011, by the following vote:

<b>AYES:</b>	<b>5</b>	<b>Councilmembers: Ehring, Waage, Reiss, Vardas, Higginbotham</b>
<b>NOES:</b>	<b>0</b>	
<b>ABSENT:</b>	<b>0</b>	
<b>ABSTAIN:</b>	<b>0</b>	

**Approved:**

**Attest:**

  
**Shelly Higginbotham**  
Mayor

  
**Elaine Ceja**  
Deputy City Clerk

## **APPENDIX D – VERIFICATION OF PLAN SUBMITTAL**

## **Commitment to Distribute the 2010 Urban Water Management Plan**

The documentation currently included in these appendices satisfies California Water Code parts 10621(b) and 10642.

Two other sections of the California Water Code specify UWMP documentation that must take place after the submission of the supplier's UWMP to the DWR. These parts are as follows:

- Part 10644(a), requiring documentation that within 30 days of submitting the UWMP to DWR, the adopted UWMP has been or will be submitted to the California State Library and any city or county to which the supplier provides water.
- Part 10645, requiring documentation that the supplier will make the UWMP available for public review no later than 30 days after submission to DWR.

In order to satisfy these requirements, the City will perform the following actions:

- The City will submit its 2010 UWMP to the California DWR on or before October 7, 2011.
- The City will send a printed or electronic copy of its 2010 UWMP to the California State Library and to the cities and counties within which it provides water. The City will do this no later than November 6, 2011 (30 days from filing with the DWR).
- The City will make their 2010 UWMP available for public review no later than November 6, 2011 (30 days from filing with the DWR).

**APPENDIX E – COMMUNITY DEVELOPMENT DEPARTMENT  
MEMORANDUM (APRIL 2001)**



**City of Pismo Beach  
Community Development Department**

**MEMORANDUM**

**TO:** R. Dennis Delzeit, Public Services Director

**FROM:** Randy Bloom, Community Development Director

**DATE:** April 11, 2001

**SUBJECT:** Revised population projections for use in sewer treatment plant expansion analysis.

**Residential development**

The California Department of Finance 1990 population estimate for the City is 8,629. In the past five years alone, approximately 300-500 new homes have been developed in the City. It is reasonable to assume that the City population has grown with the addition of new development on vacant property, and an estimate of an additional 600-700 new residents in the past eleven years is not unreasonable. Additionally, redevelopment continues in existing neighborhoods from second home beach cottages to full time permanent homes. Older neighborhoods in particular (Shell Beach, Pismo Heights, Sunset Palisades) over the past eleven years since the 1990 census have experienced a great deal of new growth in the form of expansion of small two bedroom vacation retreats into larger homes for permanent family residences.

The latest population releases by the U.S. Census Bureau for the 2000 Census indicates a present population of 8,551 for the City of Pismo Beach. This release only relates to current population and does not reflect persons per household or number of permanent households. Typically these early releases are adjusted as more information becomes available. Staff has a concern that the figure is too low and does not address the conversion growth we continue to have in our vacation homes to permanent residences. The California Department of Finance uses 2.04 persons per household (based on the 1990 census) in establishing their estimates for the City of Pismo Beach.

The City of Pismo Beach's General Plan uses 2.5 persons per household to establish a build-out population. It is anticipated that the results of the 2000 census will yield a higher persons per household ratio due to the transition we have been experiencing from vacation homes to permanent year around residences.

Staff has reviewed the development potential on all undeveloped and underdeveloped properties within the City limits and estimates that there is a potential for approximately 345 additional units that could be built. Staff's previous estimate (per memo dated February 22, 2001) assumed the lands within the City's current Sphere of Influence, which included the Los Robles Del Mar project and the Cottonwood area. Based on historic concept plans, staff had estimated approximately 683 housing units from both areas. All areas outside the City's Sphere of Influence were never included within the

- estimate (Pismo Ranch, Preserve). Based on the General Plan ratio of 2.5 persons per household and multiplying by the projected 345 additional units, the population of the City at build out would be estimated at **9,414 persons within the City Limits**. If you take the estimated 683 units outside the City limits, but within the City's current Sphere of Influence, and multiply it by the General Plan ratio it would provide for 1,708 additional persons.

The estimated total population for the City of Pismo Beach at build out, including the areas within the City's current Sphere of Influence, is estimated at **11,122 persons**.

### **Hotel/Motel development**

Since 1990, opportunities for hotel development have changed. For instance, the Dinosaur Caves property was anticipated for hotel development of approximately 250 rooms. The Dinosaur Caves property is now a public park with open space zoning. Additionally, hotel development in the Pismo Oaks area was anticipated at approximately 350 rooms; however, much of the designated property was re-zoned for single-family residential use (Seaview Estates and Paseo Ladera subdivisions)

On vacant hotel/motel zoned undeveloped and underdeveloped property, approximately 340 hotel units could be developed or approximately 100 condominium units (also permitted on hotel/motel zoned property) could be developed.

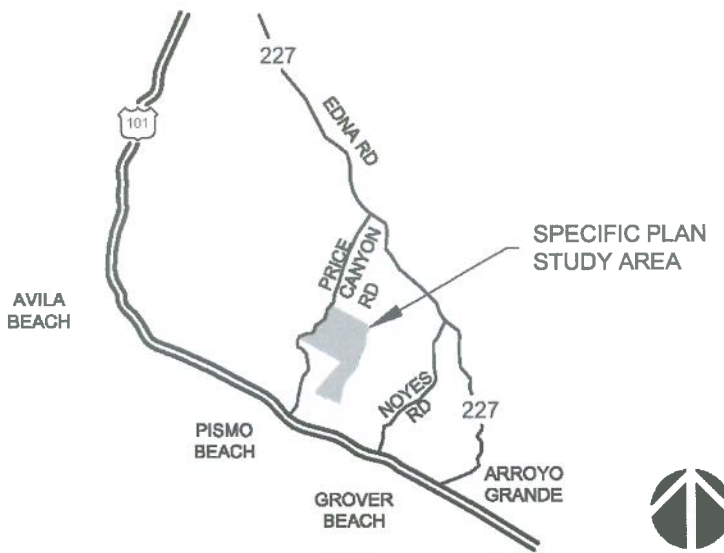
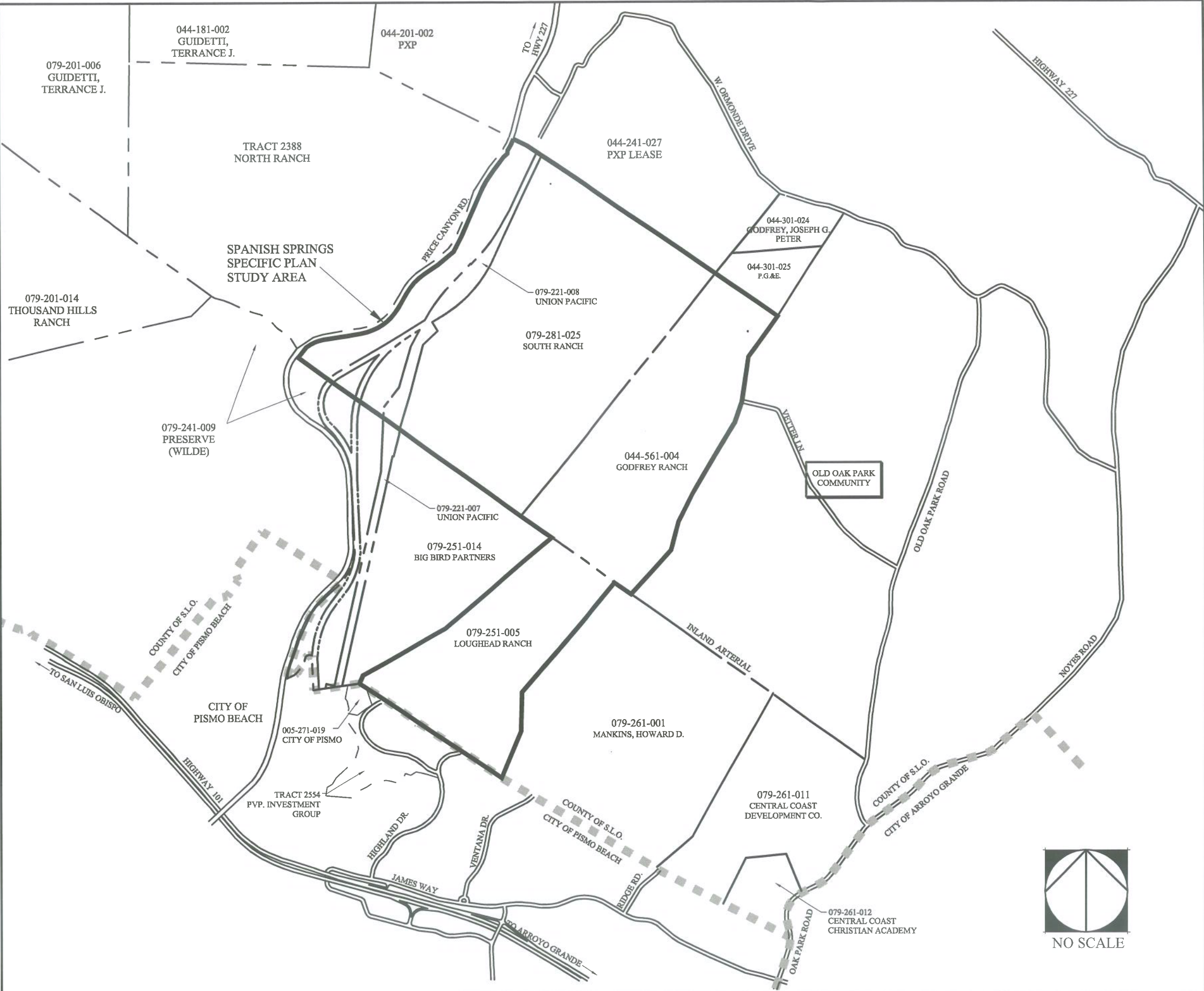
Commercially zoned property can also be developed for hotel uses with a conditional use permit. If 15% of commercially zoned property were to develop as hotel units, approximately 625 new hotel units could be projected on commercially zoned property.

Given current development trends and the availability of larger parcels of land for hotel development, it is estimated that approximately 725 to 965 new hotel/condominium vacation rentals could be developed at build out.

### **Commercially zoned property,**

Approximately 68 acres of commercially zoned is available for development if all the property was utilized only for commercial/retail/office space. If 15% of the vacant commercial property was used for hotel/motel development as noted above, approximately 58 acres of commercially zoned property would be available for commercial development.

## **APPENDIX F – PRICE CANYON PROJECT VICINITY MAP**

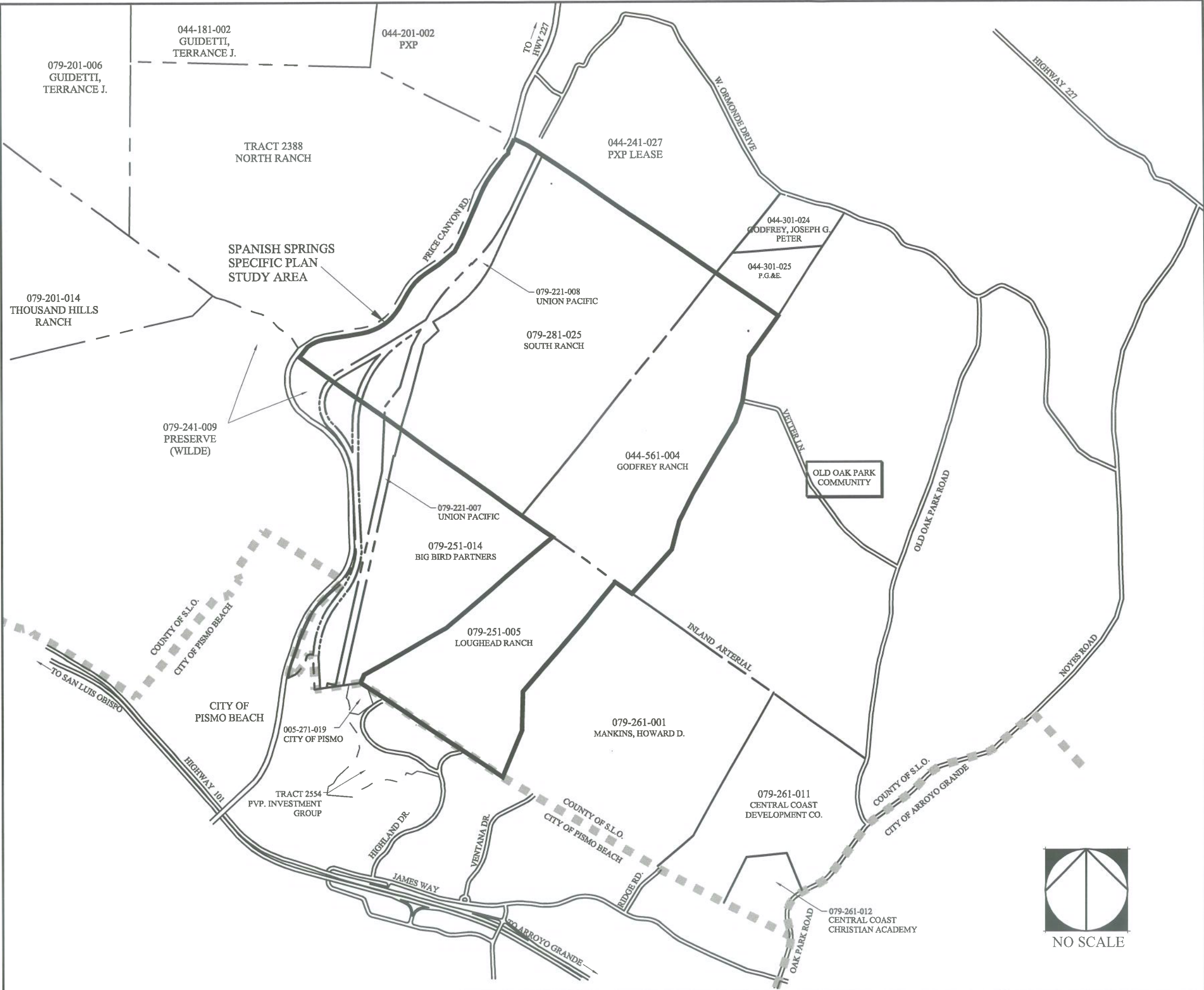


VICINITY MAP

OWNER	ENTITY
COASTAL CHRISTIAN SCHOOL CENTRAL COAST DEV.CO.	- LOS ROBLES DEL MAR
HOWARD MANKINS	- MANKINS RANCH
PALOS VERDES PROPERTIES	- PVP CITY
CITY OF PISMO BEACH	- FRIENDS OF PRICE HOUSE
UNION PACIFIC RAILROAD	- UPRR
TIM LEWY/DARREN S HETLER	- BIG BIRD PARTNERS
BRAD WILDE	- WILDE PRESERVE
JOHN KING/BHTII LLC	- GODFREY RANCH
BHTII LLC	- SOUTH RANCH
RICK LOUGHEAD/BHTII LLC	- LOUGHEAD RANCH

FIGURE 1  
VICINITY & OWNERSHIP  
MAP

SPECIFIC PLAN  
FOR  
SPANISH SPRINGS



**VICINITY MAP**

OWNER	ENTITY
COASTAL CHRISTIAN SCHOOL CENTRAL COAST DEV.CO.	- LOS ROBLES DEL MAR
HOWARD MANKINS	- MANKINS RANCH
PALOS VERDES PROPERTIES	- PVP CITY
CITY OF PISMO BEACH	- FRIENDS OF PRICE HOUSE
UNION PACIFIC RAILROAD	- UPRR
TIM LEWY/DARREN S HETLER	- BIG BIRD PARTNERS
BRAD WILDE	- WILDE PRESERVE
JOHN KING/BHTII LLC	- GODFREY RANCH
BHTII LLC	- SOUTH RANCH
RICK LOUGHEAD/BHTII LLC	- LOUGHEAD RANCH

**FIGURE 1**

**VICINITY & OWNERSHIP**

**MAP**

**SPECIFIC PLAN**

**FOR**

**SPANISH SPRINGS**

**APPENDIX G – PISMO BEACH COUNCIL AGENDA REPORT  
(OCTOBER 2009)**



## **PISMO BEACH COUNCIL AGENDA REPORT**

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### **SUBJECT / TITLE:**

**APPROVAL OF ADDITIONAL STATE WATER ALLOCATION AND DROUGHT BUFFER REQUEST**

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### **RECOMMENDATION:**

1. The City Council approve the acquisition of 1,240 acre-feet as an ongoing drought buffer for current State Water supplies.
2. That the City Council direct staff to request a planning allocation of 1,000 acre-feet of drought buffer allocation for potential reductions in Lopez Project deliveries, and possible short term pumping reductions from groundwater supplies.
3. That the City Council direct staff to request a planning allocation of 500 acre-feet of additional deliverable State Water supplies, and 500 acre-feet of drought buffer to accommodate growth within the sphere of influence areas.

---

### **EXECUTIVE SUMMARY:**

The City of Pismo Beach is fortunate to have three sources of water to meet the water demands of the community. These sources include groundwater from water wells located in Grover Beach, Lopez Project water, and State Water from Northern California. Much like a financial portfolio, diversification of water resources allows the City to respond to water shortages in one source, with enhancements from another source.

The City of Pismo Beach has an allotment of 700 acre-feet of groundwater pumped from the northern cities area of the Santa Maria Groundwater Basin. This area is often referred to as the Tri Cities Mesa area and is a relatively small groundwater basin of 8,300 acres. The amount of water that is allowed to be withdrawn from this basin is regulated by a final judgment issued as part of the Santa Maria Groundwater Basin Litigation. Other water users within the basin are the Cities of Arroyo Grande, Grover Beach, Oceano Community Services District and various private property owners that have rights to extract water from the basin.

The City of Pismo Beach has an allotment of 900 acre-feet of Lopez Project water as a member of Zone 3. Zone 3 is a special district that was formed to provide water resources to the south San Luis Obispo County region. The various political bodies that have contracts for water supply and benefit from the water resources within Zone 3 are financially obligated to pay their proportionate share of the Lopez Project costs.

The City of Pismo Beach has an allotment of 1,240 acre-feet<sup>1</sup> of State Water that is derived from Northern California. This water comes from the Feather River and is stored in Lake Orville and other reservoirs along the State Water delivery system. Like the

---

<sup>1</sup> 140 acre-feet allocated to Brad Wilde Pismo 98 LLC

Lopez Project the various political organizations that benefit from the water generated are required to contribute financially based on their proportionate share of the project cost. As the largest water project in the world, the State Water Project has many components and can be somewhat confusing. There are twenty-nine main contractors and many subcontracts and agreements for water supply throughout the state system. San Luis Obispo County (County) is a main State Water contractor that has 25,000 acre-feet of State Water allotment. The County has 8,487 acre feet of subcontracts to provide water supply to various areas within the County. The difference between the 25,000 acre-feet in State Water allotment and the 8,487acre-feet in subcontracted deliveries is the subject of this staff report.

The County has 17,513 acre-feet of unallocated State Water allotment. There appears to be additional pipeline capacity in the coastal branch aqueduct to deliver additional State Water to San Luis Obispo and Santa Barbara Counties. The County has requested that the City provide a planning allocation amount for this additional State Water allotment. In the past the City has requested 247 acre-feet. Following completion of the County Master Plan the County intends to divest themselves of any unallocated State Water allotment. This provides the City with an opportunity to secure additional drought buffer and additional State Water allocation to secure the communities water future.

A planning allocation is an amount of additional State Water that the City would like the County to reserve for Pismo Beach as the County begins negotiating with the State Department of Water Resources (DWR) and Central Coast Water Authority (CCWA) for additional State Water delivery options. The planning allocation is a nonbinding number that can be modified and refined once the additional State Water acquisition costs are determined.

Staff reviewed the reliability of the current water supplies and the amount of water required to supply the adopted sphere of influence areas to determine an appropriate planning allocation recommendation for City Council review and concurrence. Staff also reviewed the current County Drought Buffer program and has provided a separate recommendation for that program.

All of the City's current water resources have reliability concerns that may affect on a short-term basis the amount of water that can be delivered. For example the proposed Habitat Conservation Plan for the Lopez Project may require that more water be released for fish. The continued drought and lowering of groundwater levels within the basin may reduce the amount of groundwater that can be pumped from the basin. Current court action has reduced pumping from the Delta, which in turn has greatly impacted the ability of DWR to make deliveries of State Water.

### **Drought Buffer for Current State Water Supplies**

To address the uncertainty in current State Water supplies separate from the planning allocation staff is recommending that 1,240 acre-feet of drought buffer<sup>2</sup> water be

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<sup>2</sup> Drought buffer water is water that has no pipeline capacity for delivery, and is used to increase deliveries during times of drought. For example during the current drought period 40% delivery is anticipated, without a drought

acquired to firm up current State Water supplies. The City has utilized the County Drought Buffer Program over the last several years to firm up the short-term supply shortages in the State Water deliveries on a year-by-year basis. Under the County Drought Buffer Program the City pays an additional \$100 to \$150 per acre-foot in addition to the \$75 water cost to purchase drought buffer on a year-to-year basis. In years when the State Water deliveries are closer to full contract amounts the City has no increased annual cost. The City can fix the amount of the drought buffer at \$75 per acre-foot if the City agrees to purchase the water on an annual basis. Given the likelihood on continued shortages in the state system it is important that the City have drought water supplies to meet current water demands. The cost of this program is already incorporated within the rate structure and no additional rate increases would be required to implement this recommendation. Another reason to formalize the current practice at this time is that the County intends to eliminate the year-to-year drought buffer program following completion of the County Water Master Plan. The result of this action would allow the City to receive 1,240 acre-feet of State Water supply even when State Water supplies are reduced by 50%.

### **Additional State Water Planning Allocation**

The additional State Water allocation recommendation includes two components, additional drought buffer water that is relatively inexpensive and new State Water allocation that is more expensive but competitive with other water resources. The current costs for drought allocation buffer water is approximately \$75 per acre-foot and \$1,250 to \$1,500 per acre-foot for new State Water allocation with a buy in fee yet to be determined.

To determine the planning number for firming up shortages in the Lopez and groundwater systems, staff is recommending that City Council include 1000 acre-feet of State Water drought buffer water. This amount would yield approximately 500 acre-feet of water in a shortage period that the City would likely be able to deliver in the event that reductions were required in either groundwater pumping or from Lopez Project. The City would need to work with the County, CCWA and DWR to facilitate delivery of the water, however in shortage situation these arrangements can be accommodated.

The planning allocation for additional State Water to serve the Sphere of Influence areas is recommended at 500 acre-feet. This amount of water would need the same additional 500 acre-foot drought buffer component. The financing for this block of water would come from the development community and appropriate financing mechanism are recommended to be in place prior to the City Council committing to acquire this additional water supply. It is anticipated that existing ratepayers would not bear an additional burden for the additional State Water allocation for the Sphere of Influence areas.

---

buffer the City would receive 496 acre-feet of water, with a drought buffer of 1240 acre-feet the City would receive 992 acre-feet

---

**FISCAL IMPACT:**

The current rate structure contains funding to facilitate the acquisition of the annual 1,240 acre-feet of drought buffer for current State Water supplies. The additional 1,000 acre-feet of drought buffer to protect against groundwater and Lopez Project shortages would have an annual cost in the range of \$75,000 per year. The Cost for the additional State Water allocation is yet to be determined.

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**OPTIONS:**

The City Council could modify the recommended State Water and drought buffer allocation request, or choose to not part participate in program.

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**ATTACHMENTS:**

None.

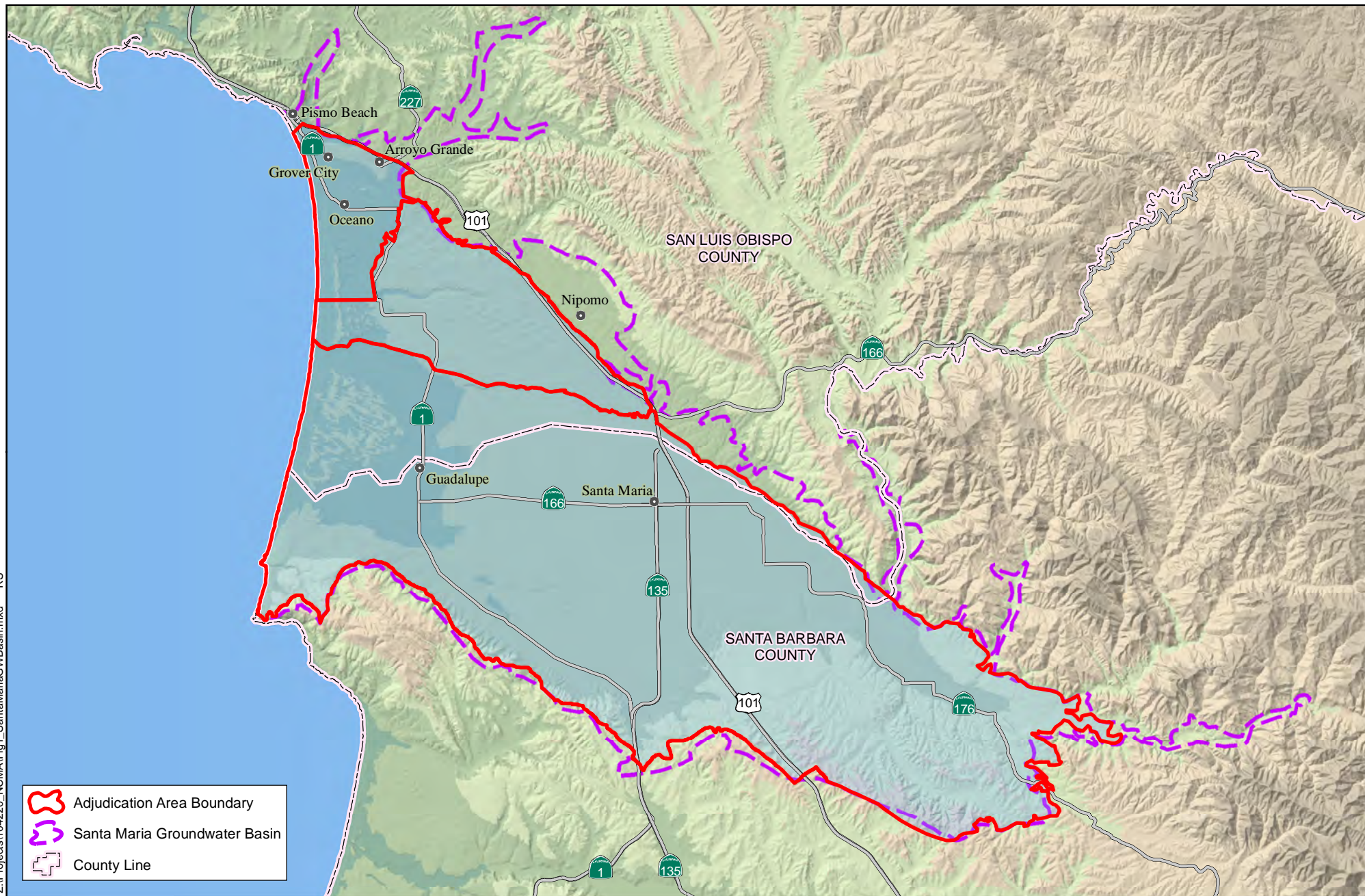
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**Prepared by:** Dwayne Chisam, P.E., Public Works Director    **Meeting Date:** October 6, 2009

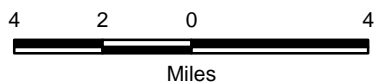
**Acting City Manager Approval:**

A handwritten signature in blue ink, appearing to read "Randy R.", followed by a horizontal line.

**APPENDIX H – NORTHERN CITIES MANAGEMENT AREA,  
SELECTED FIGURES FROM 2010 ANNUAL MONITORING  
REPORT**



-  Adjudication Area Boundary
-  Santa Maria Groundwater Basin
-  County Line



2010 Annual Monitoring Report  
San Luis Obispo and Santa Barbara Counties

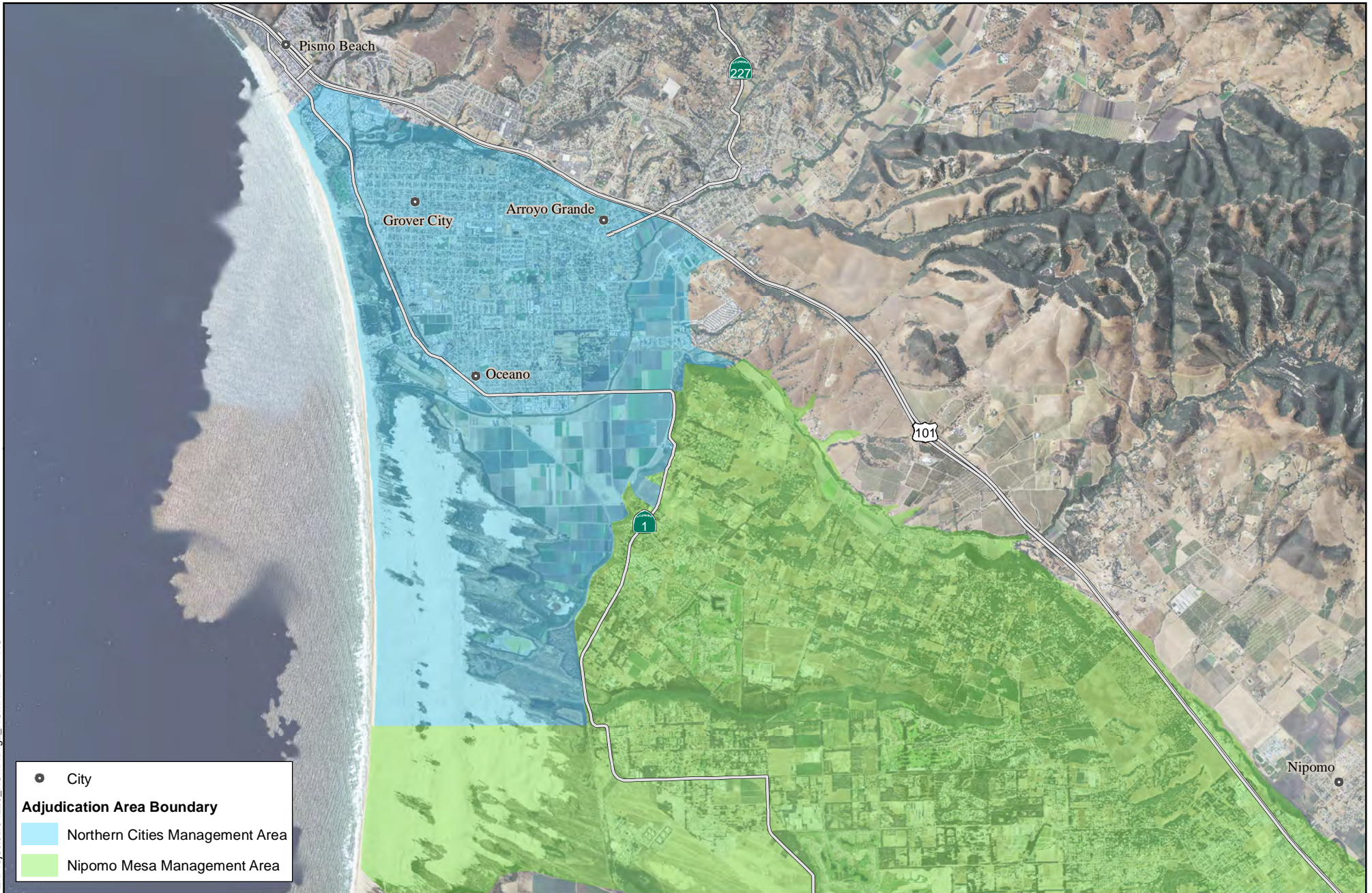
Northern Cities Management Area



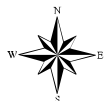
SANTA MARIA GROUNDWATER BASIN

APRIL 2011

FIGURE 1



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Miles



2010 Annual Monitoring Report  
San Luis Obispo County

Northern Cities Management Area

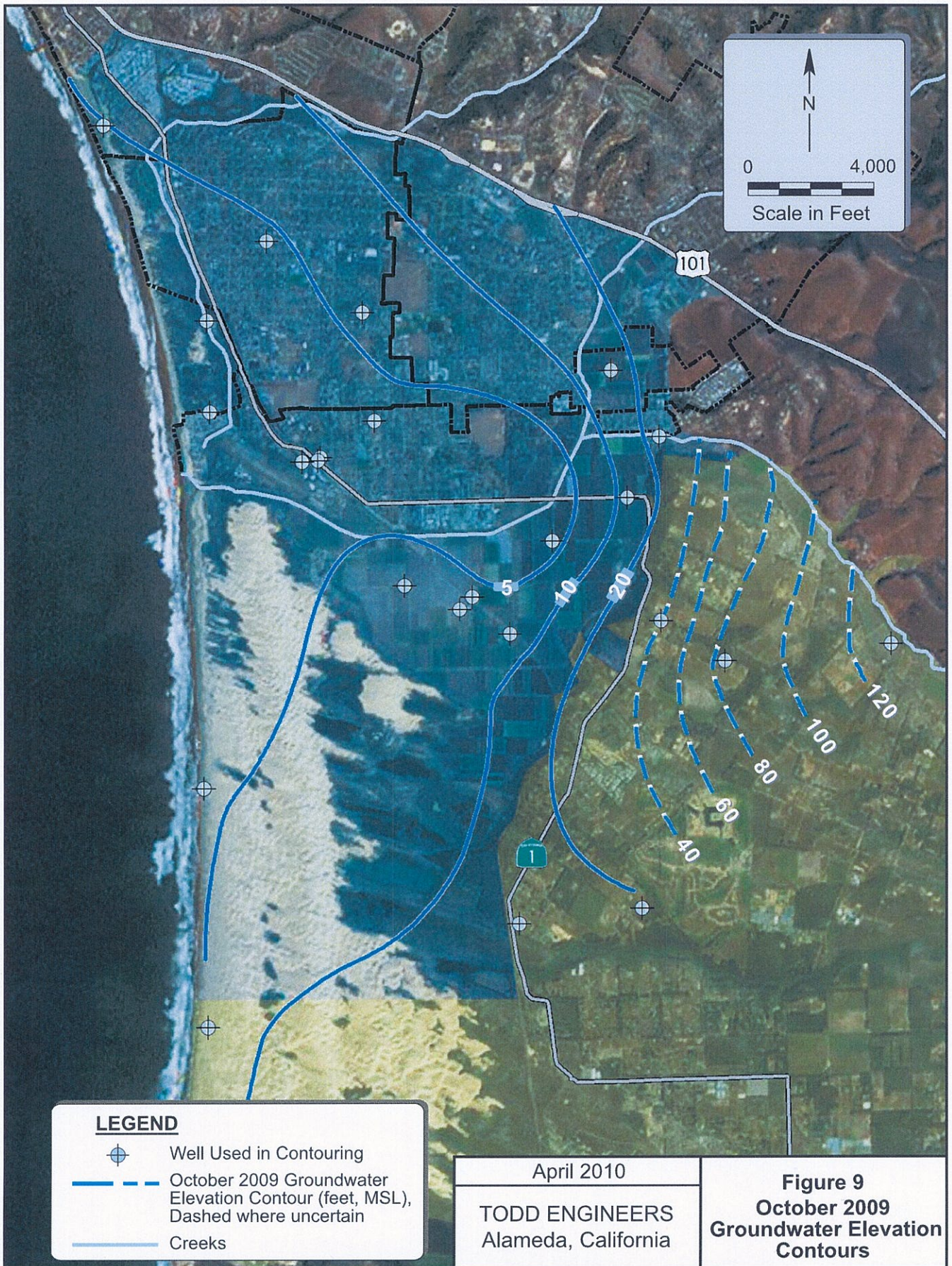


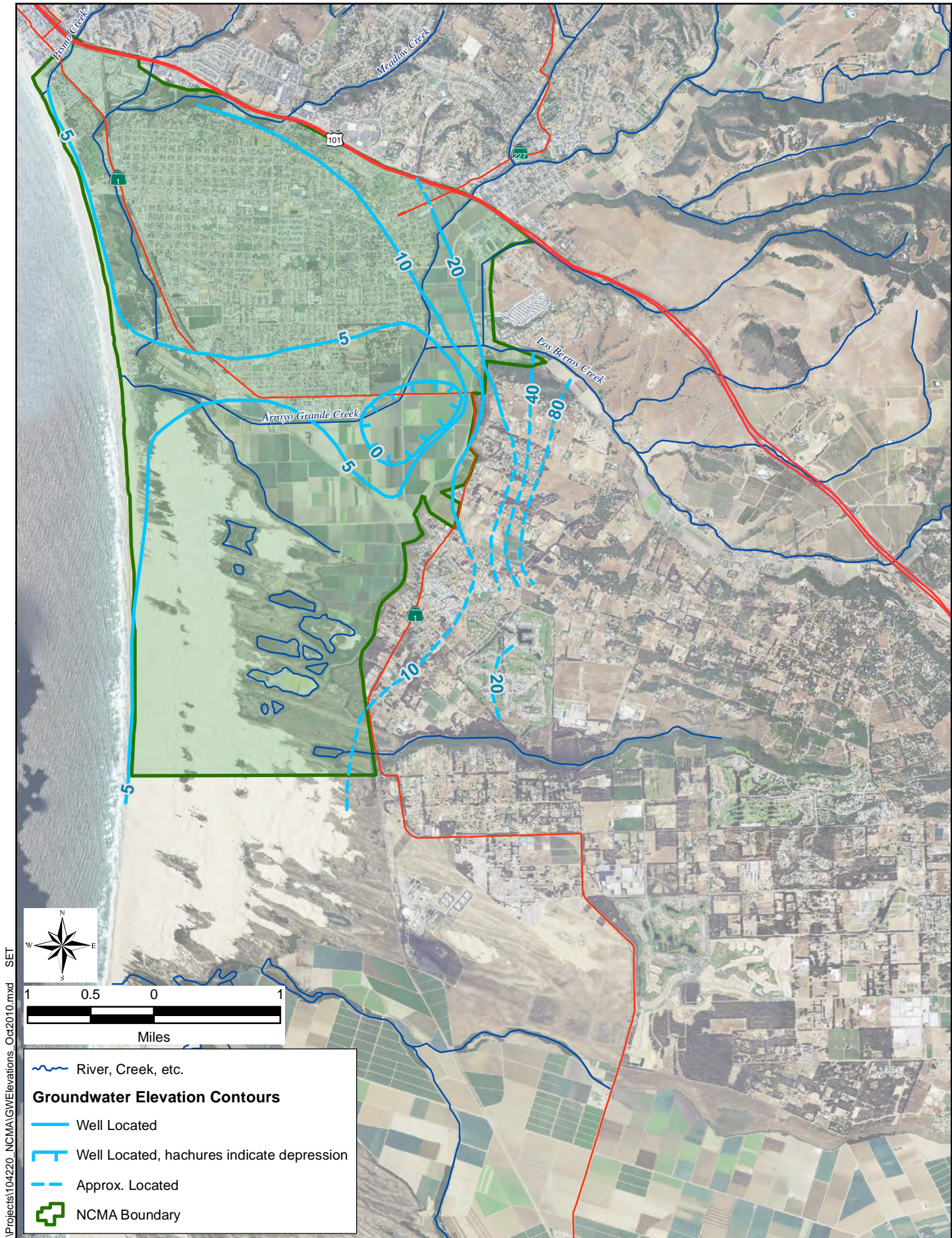
**NORTHERN CITIES MANAGEMENT AREA**

APRIL 2011

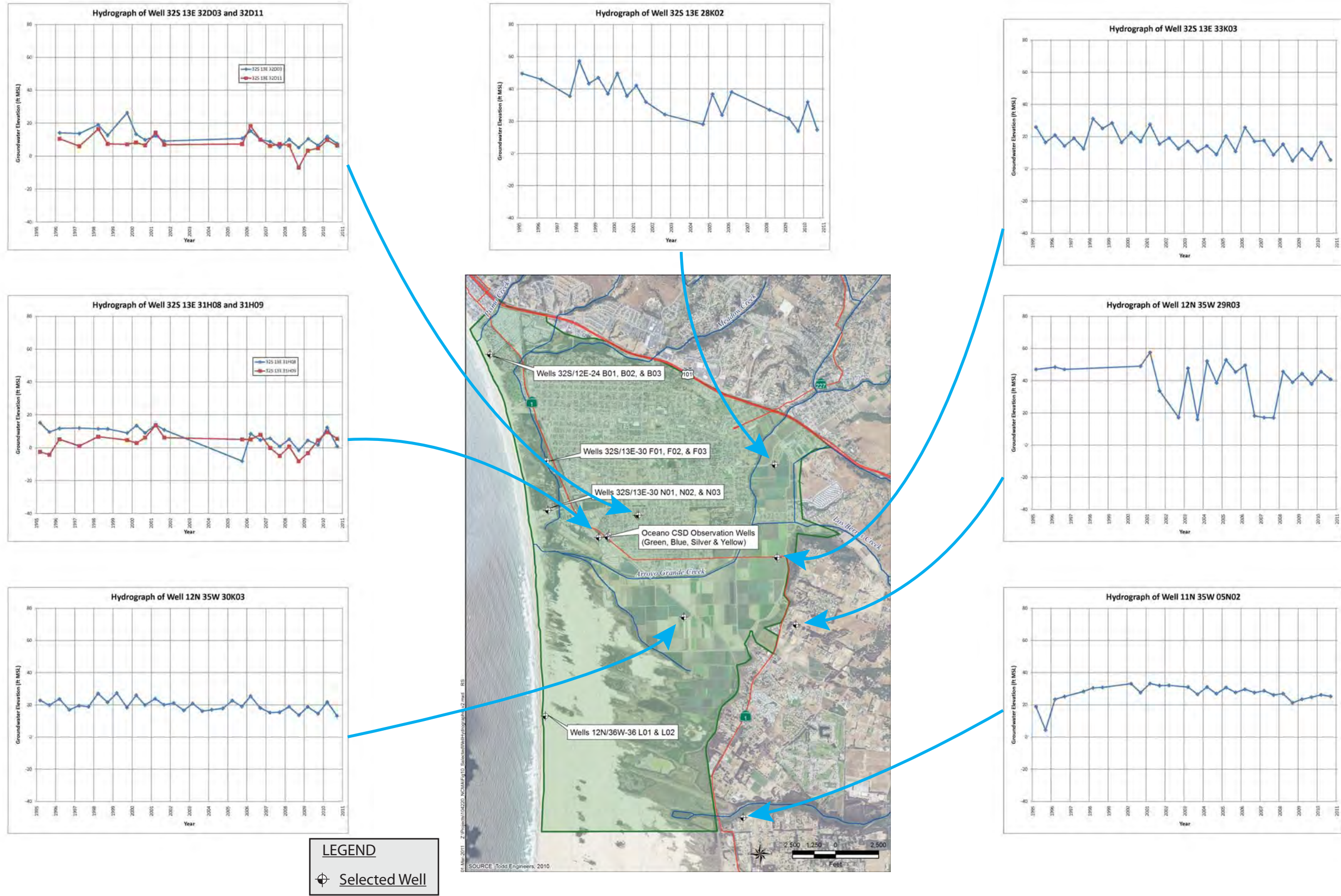
FIGURE 2

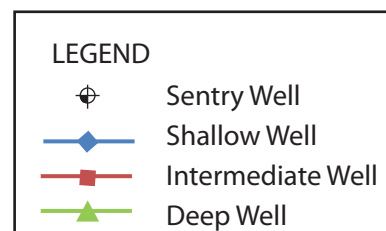
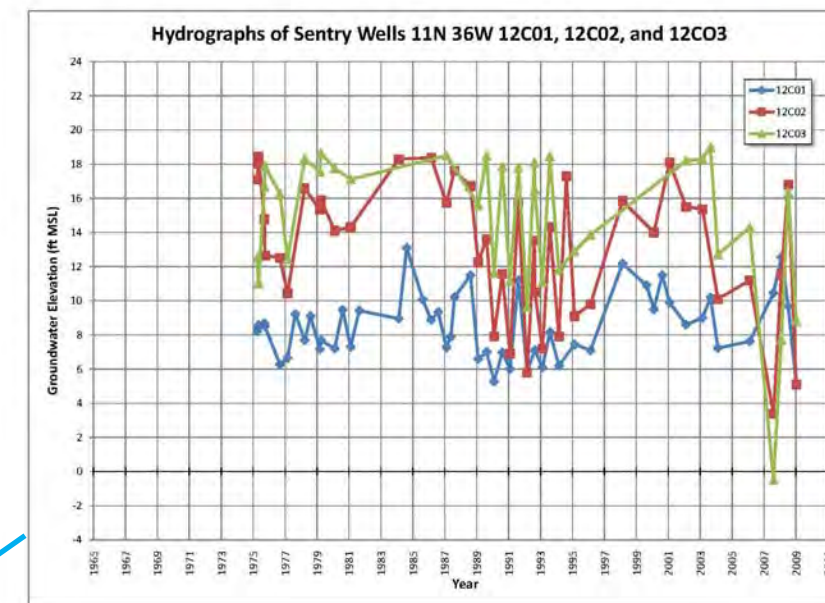
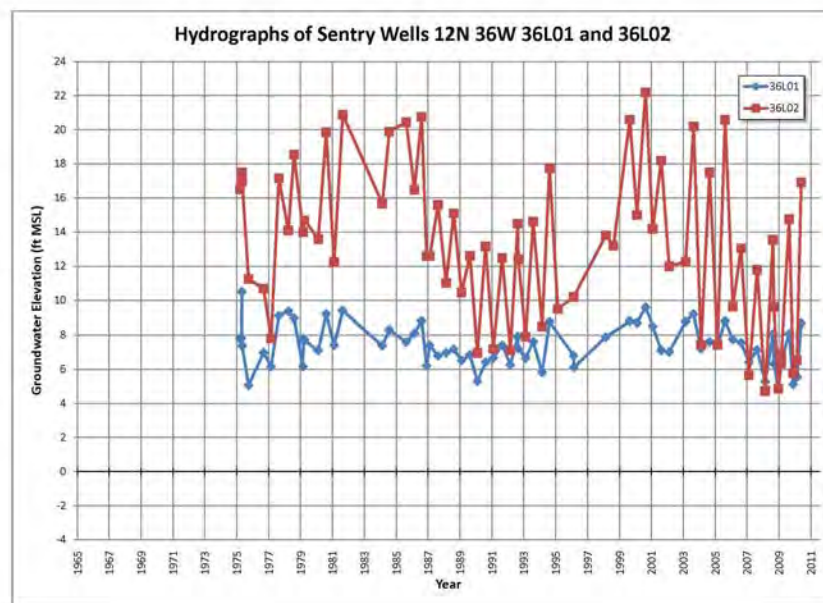
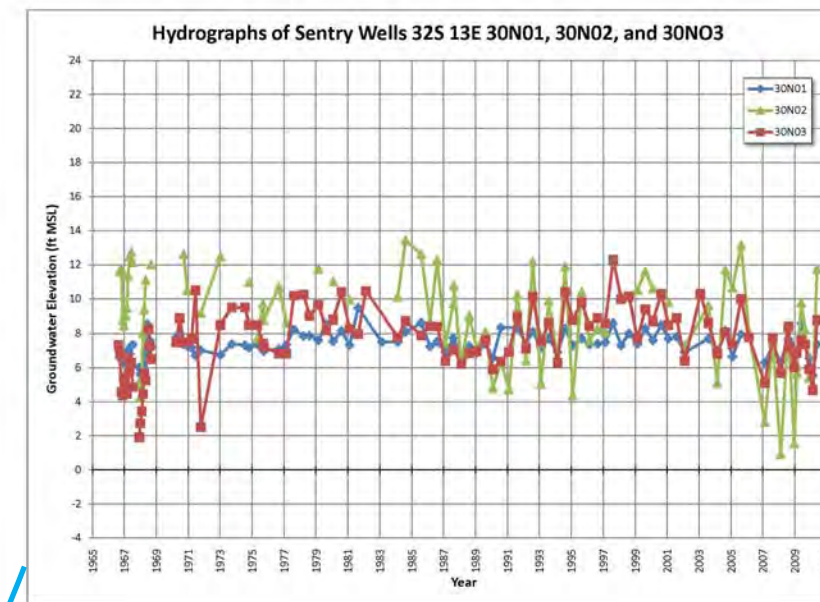
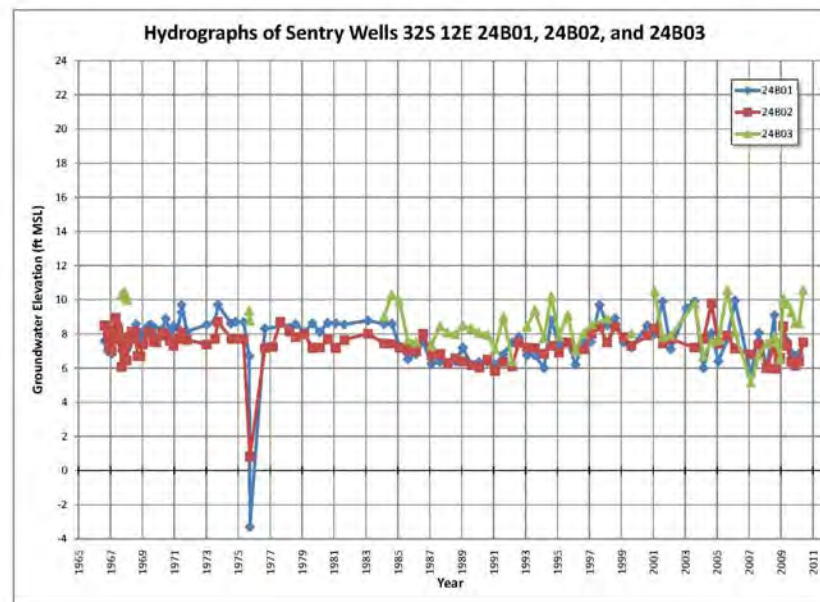
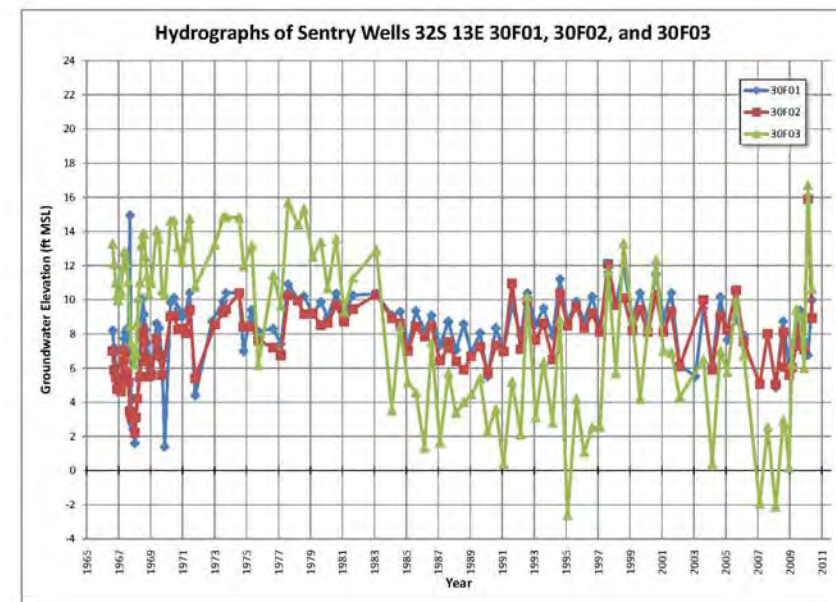
# **APPENDIX I – HISTORICAL GROUNDWATER ELEVATION DATA**

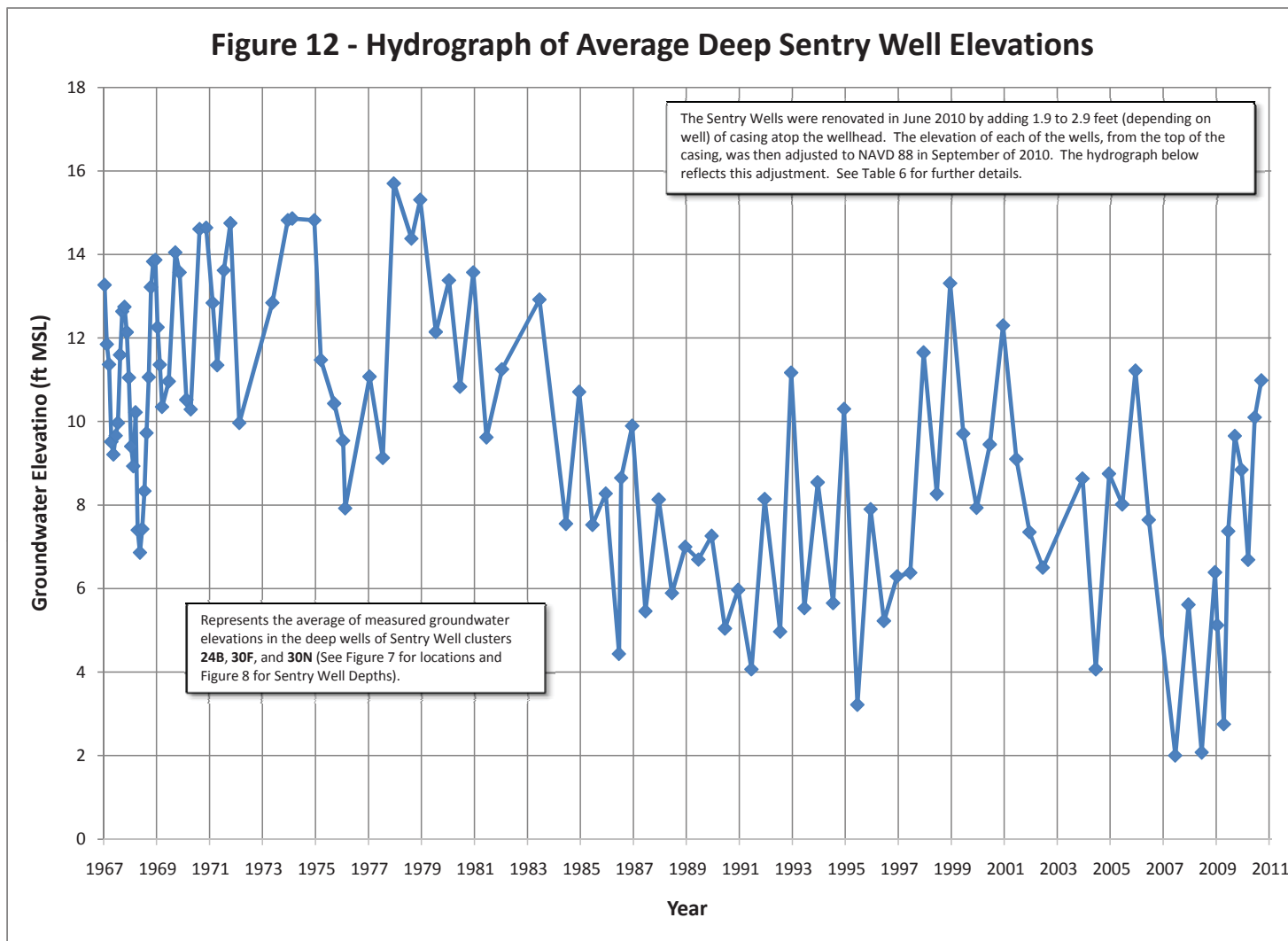




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## **APPENDIX J – GENTLEMEN’S AGREEMENT**

**AGREEMENT REGARDING  
MANAGEMENT OF THE  
ARROYO GRANDE GROUNDWATER BASIN**

**A. Parties**

This Agreement is entered into among the Cities of Arroyo Grande, Pismo Beach, Grover Beach and the Oceano Community Services District (collectively referred to hereinafter as "Parties" or "Urban Parties").

**B. Recitals**

WHEREAS, in January 1983, a Technical Advisory Committee consisting of representatives of Arroyo Grande, Grover City, Pismo Beach, Oceano Community Services District, Port San Luis Harbor District, the Farm Bureau, Avila Beach County Water District and the County of San Luis Obispo ("Committee") determined in reliance on the 1979 Report of the Department of Water Resources entitled Ground Water in the Arroyo Grande Area that the safe yield of the Arroyo Grande Groundwater Basin ("Basin") is 9,500 acre feet per year;

WHEREAS, in or about February 1983, the Parties agreed to enter into a voluntary groundwater management plan to provide for effective management of groundwater resources in the Basin through which each party was given sufficient water to meet its needs as then projected; such needs being met in part by the City of Arroyo Grande foregoing 358 acre feet per year of its historical use and the City of Pismo Beach foregoing 20 acre feet per year of its historical use;

WHEREAS, this management plan provided a reasonable division of the safe yield of the Basin without court imposed groundwater basin adjudication;

WHEREAS, on February 9, 1983, the terms of the management plan were incorporated into Resolution No. 83-1 of the South San Luis Obispo County Water Association Approving the Recommendations of the Committee relating to the Basin (the "Resolution");

WHEREAS, each of the Parties have adopted individual resolutions endorsing the provisions of the Resolution;

WHEREAS, the Parties have generally complied with the terms and conditions of the Resolution; and

WHEREAS, general compliance with the Resolution has proven to be a fair and efficient means of managing and protecting groundwater resources in the Basin as confirmed by the revised final draft report prepared by the Department of Water Resources entitled, Water Resources of Arroyo Grande and Nipomo Mesa, January 2000.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Division of Safe Yield.

a. The Parties agree to a division of the safe yield of the Basin as follows:

Applied Irrigation	5,300 acre feet
--------------------	-----------------

Subsurface flow to ocean	200 acre feet
--------------------------	---------------

Urban Use:

City of Arroyo Grande	1,202 acre feet
-----------------------	-----------------

City of Grover Beach	1,198 acre feet
----------------------	-----------------

City of Pismo Beach	700 acre feet
---------------------	---------------

Oceano Community Services District	900 acre feet
------------------------------------	---------------

b. Any increase or decrease in the safe yield of the Basin attributable to changed operation of the Lopez Reservoir, or any other cause, shall first be divided between the Urban Parties and applied irrigation on a pro rata basis using the formula from the 1983 Gentlemen's Agreement, fifty-seven percent (57%) to applied irrigation and forty-three percent (43%) to the Urban Parties. Thereafter, the first 378 acre feet per year of any increase of safe yield allocated to the Urban Parties shall be divided between the City of Arroyo Grande and the City of Pismo Beach on a pro rata basis (95% to Arroyo Grande and 5% to Pismo Beach).

c. The entitlements of each respective Urban Party may be increased based upon the conversion of irrigated agricultural lands to urban use. An Urban Party to this Agreement may increase its entitlement for urban use by a factor of three (3) acre feet per acre per year minus the calculated urban usage per acre per year upon the conversion of irrigated agricultural land to urban usage. "Irrigated agricultural land" shall be that land within the corporate limits of the party that was identified as irrigated agricultural land in the 1979 Department of Water Resources Report entitled Ground Water in the Arroyo Grande Area. This agricultural conversion factor may be applied to all acreage converted to urban use from January 1, 1983, throughout the life of this Agreement. Such an agricultural conversion factor is in the best interests of the overall Basin in that it will not result in any decline in the groundwater service over time. The Parties agree that no water should be converted to urban use within the Basin without establishing that it was irrigated agricultural land as defined in the 1979 Department of Water Resources Report, Groundwater in the Arroyo Grande Area.

d. The Parties agree and understand that the safe yield figures utilized in this Agreement are a product of the 1979 Department of Water Resources Report regarding the Arroyo Grande Basin as adjusted by the 1983 ad hoc Technical Advisory Committee and that the division of the resources is based upon the historical use of each party and a practical accommodation of each Party's needs as they existed at the time of the adoption of the 1983

**APPENDIX K – SANTA MARIA RIVER VALLEY  
GROUNDWATER BASIN ADJUDICATION JUDGMENT**

FILED

JAN 25 2008

KIRI TORRE  
Chief Executive Officer/Clerk  
Superior Court of CA County of Santa Clara  
BY *[Signature]* DEPUTY  
ROWENA A. WALKER

SUPERIOR COURT OF CALIFORNIA  
COUNTY OF SANTA CLARA

SANTA MARIA VALLEY WATER  
CONSERVATION DISTRICT,

Plaintiff,

vs.

CITY OF SANTA MARIA, ET AL.,

Defendants.

AND RELATED CROSS-ACTIONS AND  
ACTIONS CONSOLIDATED FOR ALL  
PURPOSES

SANTA MARIA GROUNDWATER  
LITIGATION  
Lead Case No. 1-97-CV-770214

(CONSOLIDATED FOR ALL  
PURPOSES)

[Consolidated With Case Numbers:  
CV 784900; CV 785509; CV 785522;  
CV 787150; CV 784921; CV 785511;  
CV 785936; CV 787151; CV 784926;  
CV 785515; CV 786791; CV 787152;  
1-05-CV-036410]

San Luis Obispo County Superior  
Court Case Nos. 990738 and 990739

**JUDGMENT AFTER TRIAL**

This matter came on for trial in five separate phases. Following the third phase of trial, a large number of parties entered into a written stipulation dated June 30, 2005 to resolve their differences and requested that the court approve the settlement and make its terms binding on them as a part of any final judgment entered in this case. Subsequent to the execution of the stipulation by the original settling parties, a number of additional parties have agreed to be bound by the stipulation – their signatures are included in the attachments to this judgment.

1 The June 30, 2005 Stipulation is attached as Exhibit "1;" and all exhibits to the  
2 Stipulation are separately attached as Exhibits "1A" through "1H". The Stipulating Parties are  
3 identified on Exhibit "1A." The court approves the Stipulation, orders the Stipulating Parties  
4 only to comply with each and every term thereof, and incorporates the same herein as though  
5 set forth in full. No non-stipulating party is bound in any way by the stipulation except as the  
6 court may otherwise independently adopt as its independent judgment a term or terms that are  
7 the same or similar to such term or provision of the stipulation.

8 As to all remaining parties, including those who failed to answer or otherwise appear,  
9 the court heard the testimony of witnesses, considered the evidence found to be admissible by  
10 the court, and heard the arguments of counsel. Good cause appearing, the court finds and  
11 orders judgment as follows.

12 As used in this Judgment, the following terms shall have the meanings herein set forth:

13 Basin – The groundwater basin described in the Phase I and II orders of the court, as  
14 modified, with attachments and presented in Exhibit "1B".

15 Defaulting Parties – All persons or entities listed on Exhibit "3".

16 Imported Water – Water within the Basin received from the State Water Project,  
17 originating outside the Basin, that absent human intervention would not recharge or be used in  
18 the Basin.

19 LOG Parties – All persons or entities listed on Exhibit "2," listed under the subheading  
20 "LOG Parties".

21 Non-Stipulating Parties – All Parties who did not sign the Stipulation, including the  
22 Defaulting Parties and the LOG and Wineman Parties.

23 Parties – All parties to the above-referenced action, including Stipulating Parties, Non-  
24 Stipulating Parties, and Defaulting Parties.

25 Public Water Producers – City of Santa Maria, Golden State Water Company, Rural  
26 Water Company, the "Northern Cities" (collectively the Cities of Arroyo Grande, Pismo  
27 Beach, and Grover Beach, and Oceano Community Services District), and the Nipomo  
28 Community Services District.

1        Return Flows – All water which recharges the Basin after initial use, through the use of  
2 percolation ponds and others means, derived from the use and recharge of imported water  
3 delivered through State Water Project facilities.

4        Stipulating Parties – All Parties who are signatories to the Stipulation.

5        Stipulation – The Stipulation dated June 30, 2005 and incorporated herein as Exhibit  
6 “1,” with each of its Exhibits separately identified and incorporated herein as Exhibits “1A”  
7 through “1H”.

8        Storage Space – The portion of the Basin capable of holding water for subsequent  
9 reasonable and beneficial uses.

10       Wineman Parties – All persons or entities listed on Exhibit “2,” under the subheading  
11 “Wineman Parties”.

12       The following Exhibits are attached to this Judgment:

13       1.    *Exhibit “1,”* June 30, 2005 Stipulation and the following exhibits thereto:

14           a.    *Exhibit “1A,”* list identifying the Stipulating Parties and the parcels of  
15 land bound by the Stipulation.

16           b.    *Exhibit “1B,”* Phase I and II Orders, as modified, with attachments.

17           c.    *Exhibit “1C,”* map of the Basin and boundaries of the three  
18 Management Areas.

19           d.    *Exhibit “1D,”* map identifying those lands as of January 1, 2005: 1)  
20 within the boundaries of a municipality or its sphere of influence, or within the process of  
21 inclusion in its sphere of influence; or 2) within the certificated service area of a publicly  
22 regulated utility; and a list of selected parcels that are nearby these boundaries which are  
23 excluded from within these areas.

24           e.    *Exhibit “1E,”* 2002 Settlement Agreement between the Northern Cities  
25 and Northern Landowners.

26           f.    *Exhibit “1F,”* the agreement among Santa Maria, Golden State and  
27 Guadalupe regarding Twitchell Project and the Twitchell Management Authority.

28           g.    *Exhibit “1G,”* the court’s Order Concerning Electronic Service of

1 Pleadings and Electronic Posting of Discovery Documents dated June 27, 2000.

2 h. *Exhibit "1H,"* the form of memorandum of agreement to be recorded.

3 2. *Exhibit "2,"* List of Non-Stipulating LOG and Wineman Parties and recorded  
4 deed numbers of property they owned at the time of trial.

5 3. *Exhibit "3,"* List of Defaulting parties.

6 **A declaratory judgment and physical solution are hereby adjudged and decreed**  
7 **as follows:**

8 1. As of the time of trial, LOG and Wineman Parties owned the real property,  
9 listed by assessor's parcel numbers, as presented in Exhibit 2.

10 2. The City of Santa Maria and Golden State Water Company are awarded  
11 prescriptive rights to ground water against the non-stipulating parties, which rights shall be  
12 measured and enforced as described below.

13 3. The City of Santa Maria and Golden State Water Company have a right to use  
14 the Basin for temporary storage and subsequent recapture of the Return Flows generated from  
15 their importation of State Water Project water, to the extent that such water adds to the supply  
16 of water in the aquifer and if there is storage space in the aquifer for such return flows,  
17 including all other native sources of water in the aquifer. The City of Santa Maria's Return  
18 Flows represent 65 percent of the amount of imported water used by the City. Golden State  
19 Water Company's Return Flows represent 45 percent of the amount of imported water used by  
20 Golden State in the basin.

21 4. (a) The Northern Cities have a prior and paramount right to produce 7,300 acre-  
22 feet of water per year from the Northern Cities Area of the Basin; and (b) the Non-Stipulating  
23 Parties have no overlying, appropriative, or other right to produce any water supplies in the  
24 Northern Cities Area of the Basin.

25 5. The Groundwater Monitoring Provisions and Management Area Monitoring  
26 Programs contained in the Stipulation, including Sections IV(D) (All Management Areas);  
27 V(B) (Santa Maria Management Area), VI(C) (Nipomo Mesa Management Area), and VII (1)  
28 (Northern Cities Management Area), inclusive, are independently adopted by the court as

1 necessary to manage water production in the basin and are incorporated herein and made terms  
2 of this Judgment. The Non-Stipulating Parties shall participate in, and be bound by, the  
3 applicable Management Area Monitoring Program. Each Non-Stipulating Party also shall  
4 monitor their water production, maintain records thereof, and make the data available to the  
5 court or its designee as may be required by subsequent order of the court.

6 6. No Party established a pre-Stipulation priority right to any portion of that  
7 increment of augmented groundwater supply within the Basin that derives from the Twitchell  
8 Project's operation.

9 7. The court determines that there is a reasonable likelihood that drought and  
10 overdraft conditions will occur in the Basin in the foreseeable future that will require the  
11 exercise of the court's equity powers. The court therefore retains jurisdiction to make orders  
12 enforcing the rights of the parties hereto in accordance with the terms of this judgment.

13 a. Groundwater

14 i. The overlying rights of the LOG and Wineman Parties shall be  
15 adjusted by amounts lost to the City of Santa Maria and Golden State Water Company by  
16 prescription. The prescriptive rights of the City of Santa Maria and Golden State Water  
17 Company must be measured against the rights of all overlying water producers pumping in the  
18 aquifer as a whole and not just against the LOG and Wineman Parties because adverse  
19 pumping by the said water producers was from the aquifer as a whole and not just against the  
20 non-stipulating parties. The City of Santa Maria established total adverse appropriation of  
21 5100 acre feet per year and Golden State Water Company established adverse appropriation of  
22 1900 acre feet a year, measured against all usufructuary rights within the Santa Maria Basin.  
23 The City of Santa Maria and Golden State Water Company having waived the right to seek  
24 prescription against the other stipulating parties, may only assert such rights against the non  
25 stipulating parties in a proportionate quantity. To demonstrate the limited right acquired by  
26 the City of Santa Maria and Golden State Water Company, by way of example, if the  
27 cumulative usufructuary rights of the LOG and Wineman Parties were 1,000 acre-feet and the  
28 cumulative usufructuary rights of all other overlying groundwater right holders within the

1 Basin were 100,000 acre-feet, the City of Santa Maria and Golden State Water Company  
2 would each be entitled to enforce 1% of their total prescriptive right against the LOG and  
3 Wineman Parties. That is, Golden State Water Company could assert a prescriptive right of  
4 19 annual acre-feet, and the City of Santa Maria 51 annual acre-feet, cumulatively against the  
5 LOG and Wineman Parties, each on a proportionate basis as to each LOG and Wineman  
6 Party's individual use.

7                   ii.     The Defaulting Parties failed to appear at trial and prove any  
8 usufructuary water rights. The rights of the Defaulting Parties, if any, are subject to the  
9 prescriptive rights of the City of Santa Maria and Golden State Water Company, as well as the  
10 other rights of said parties as established herein.

11                   b.     Imported Water

12                   The City of Santa Maria and Golden State Water Company shall have rights to Return  
13 Flows in the amount provided above.

14                   c.     Northern Cities

15                   The rights of all Parties in the Northern Cities Management Area shall be governed as  
16 described above on page 4, lines 21 to 24.

17                   8.     The LOG and Wineman Parties have failed to sustain the burden of proof in  
18 their action to quiet title to the quantity of their ground water rights as overlying owners. All  
19 other LOG and Wineman party causes of action having been dismissed, judgment is hereby  
20 entered in favor of the Public Water Producers as to the quiet title causes of action brought by  
21 the LOG and the Wineman Parties. Legal title to said real property is vested in the Log and  
22 Wineman Parties and was not in dispute in this action.

23                   9.     Each and every Party, their officers, agents, employees, successors and assigns,  
24 are enjoined and restrained from exercising the rights and obligations provided through this  
25 Judgment in a manner inconsistent with the express provisions of this Judgment.

26                   10.    Except upon further order of the court, each and every Party and its officers,  
27 agents, employees, successors and assigns, is enjoined and restrained from transporting  
28 groundwater to areas outside the Basin, except for those uses in existence as of the date of this

Judgment; provided, however, that groundwater may be delivered for use outside the Basin as long as the wastewater generated by that use of water is discharged within the Basin, or agricultural return flows resulting from that use return to the Basin.

11. Jurisdiction, power and authority over the Stipulating Parties as between one another are governed exclusively by the Stipulation. The court retains and reserves jurisdiction as set forth in this Paragraph over all parties hereto. The court shall make such further or supplemental orders as may be necessary or appropriate regarding interpretation and enforcement of all aspects of this Judgment, as well as clarifications or amendments to the Judgment consistent with the law.

12. Any party that seeks the court's exercise of reserved jurisdiction shall file a noticed motion with the court. Any noticed motion shall be made pursuant to the court's Order Concerning Electronic Service of Pleadings and Electronic Posting of Discovery Documents dated June 27, 2000.

13. The court shall exercise *de novo* review in all proceedings. The actions or decisions of any Party, the Monitoring Parties, the TMA, or the Management Area Engineer shall have no heightened evidentiary weight in any proceedings before the court.

14. As long as the court's electronic filing system remains available, all court filings shall be made pursuant to court's Order Concerning Electronic Service of Pleadings and Electronic Posting of Discovery Documents dated June 27, 2000, or any subsequent superseding order. If the court's electronic filing system is eliminated and not replaced, the Parties shall promptly establish a substitute electronic filing system and abide by the same rules as contained in the court's Order.

15. Nothing in this Judgment shall be interpreted as relieving any Party of its responsibilities to comply with state or federal laws for the protection of water quality or the provisions of any permits, standards, requirements, or order promulgated thereunder.

16. Each Party shall designate the name, address and e-mail address, if any, to be used for purposes of all subsequent notices and service by a designation to be filed within thirty days after entry of this Judgment. This designation may be changed from time to time

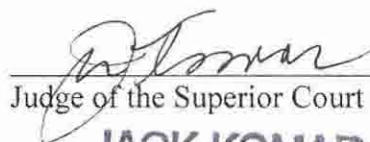
1 by filing a written notice with the court. Any Party desiring to be relieved of receiving notices  
2 may file a waiver of notice on a form approved by the court. The court shall maintain at all  
3 times a current list of Parties to whom notices are to be sent and their addresses for purposes  
4 of service. The court shall also maintain a full current list of names, addresses, and e-mail  
5 addresses of all Parties or their successors, as filed herein. Copies of such lists shall be  
6 available to any Person. If no designation is made, a Party's designee shall be deemed to be, in  
7 order of priority: i) the Party's attorney of record; ii) if the Party does not have an attorney of  
8 record, the Party itself at the address specified.

9 17. All real property owned by the Parties within the Basin is subject to this  
10 Judgment. The Judgment will be binding upon and inure to the benefit of each Party and their  
11 respective heirs, executors, administrators, trustees, successors, assigns, and agents. Any  
12 party, or executor of a deceased party, who transfers property that is subject to this judgment  
13 shall notify any transferee thereof of this judgment and shall ensure that the judgment is  
14 recorded in the line of title of said property. This Judgment shall not bind the Parties that  
15 cease to own property within the Basin, and cease to use groundwater. Within sixty days  
16 following entry of this Judgment, the City of Santa Maria, in cooperation with the San Luis  
17 Obispo entities and Golden State, shall record in the Office of the County Reporter in Santa  
18 Barbara and San Luis Obispo Counties, a notice of entry of Judgment.

19 The Clerk shall enter this Judgment.

20  
21 SO ORDERED, ADJUDGED, AND DECREED.

22  
23 Dated: January 25, 2008

  
Judge of the Superior Court  
**JACK KOMAR**

## **APPENDIX L – WATER SHORTAGE CONTINGENCY PLAN**

**WATER SHORTAGE CONTINGENCY PLAN**

**CITY OF PISMO BEACH  
PUBLIC WORKS DEPARTMENT  
1000 BELLO STREET  
PISMO BEACH, CA 93449**

**(805) 773-4656**

**SEPTEMBER 1992**

## INTRODUCTION

*The California legislature enacted Assembly Bill 11X during the 1991 legislative session which amended Sections 10620, 10621, 10631, and 10652 and added Section 10656 to the California Water Code. Assembly Bill 11X mandated that every urban water supplier providing municipal water directly or indirectly to more than 3000 customers or supplying more than 3000 ac.ft. annually to develop a Water Shortage Contingency Plan. The legislature further mandated that the plan be filed with the California Department of Water Resources before January 31, 1992.*

*The legislation also specifically called for a certain format to be followed in the preparation of the plan, and the attached plan prepared by the City of Pismo Beach is in conformance with the requirements of the Assembly Bill. The legislation further provided that a public hearing must be held by City Council to adopt the Water Shortage Contingency Plan, and that a resolution of City Council be approved with the adoption of the plan.*

*The Public Works Commission of the City of Pismo Beach reviewed and sent a plan forward to City Council with revisions during August 1992. The City Council of the City of Pismo Beach reviewed the plan at a public hearing on September 15, 1992 and adopted Resolution 92-92 which approved the plan and directed that the plan be forwarded to the California Department of Water Resources.*

## SECTION I

### *Past, Current, and Projected Water Use*

*As identified in the November 6, 1989 Status Report for City Water Supplies, prior to 1983 the City's water use ranged between 155 and 200 gpcd, but started increasing in the mid to late 80's, and peaked at 245 gpcd in 1989 (Exhibit 1). However, this trend changed when per capita water use decreased because of the drought and the implementation of mandatory water conservation measures (Exhibit 2).*

*Currently the per capita water use is approximately 205 gpcd, and the City's is projecting that amount of water use per capita in projecting our long-term water needs. The City currently has sufficient water for our existing population. Based upon our current General Plan buildout we have the potential to develop the equivalent of 2780 residential units.*

*At an average City water demand of .4 ac.ft. per residential unit per year, the City therefore needs 1100 ac.ft. of water to meet the buildout needs of the General Plan.*

## SECTION II

### *Available Water Supply*

*On November 6, 1989, the City Council adopted urgent water policies after concluding that the City had overcommitted its firm water supply. The City then implemented a Mandatory Water Conservation Ordinance, a "Retrofit" Ordinance (requiring that new users must provide their own water by retrofitting existing fixtures), and directed staff to pursue all possible means of bringing to the City new reliable water supplies. Current City water supplies are both from groundwater and surface water, and the City in May 1992 contracted for 1100 ac.ft. of State Water to meet the needs of our current General Plan buildout population.*

## SECTION III

### *Status of Action*

*The City's Mandatory Water Conservation Ordinance (Exhibit 2) has four stages of water supplies, from normal water supply to critical water supply conditions. The critical water supply condition allows the City to impose any water rationing requirement which it deems appropriate to protect the public health, safety, welfare, comfort and convenience of our citizens. Additionally, the City's Water Contingency Plan (Exhibit 5) outlines steps the City could take to augment water supplies and reduce the level of rationing.*

## SECTION IV

### *Mandatory Provisions to Reduce Water Use*

*As stated earlier, in May 1990 the City adopted Ordinance 90-10 which is the City's Mandatory Water Conservation Ordinance. Under our first three conditions of water supply, normal, moderately restricted, and severely restricted, the City prohibits water use as follows:*

- 1. Use of water which results in excessive gutter runoff is prohibited.*
- 2. Outdoor water use, except irrigation, is prohibited such that it will not be used for cleaning driveways, patios, parking lots, sidewalks, streets, and washing cars by use of a hose is prohibited.*
- 3. Outdoor irrigation is prohibited between the hours of 10:00 a.m. and 4:00 p.m., and irrigation of private and public landscaping, turf areas and gardens is permitted at even numbered addresses only on Mondays Thursdays and at odd-numbered addresses on Tuesdays and Fridays.*
- 4. Restaurants may not serve water unless requested by the customer.*

5. *Emptying and refilling swimming pools is prohibited.*
6. *Use of potable water for compaction or dust control is prohibited.*

## **SECTION V**

### ***Consumption Limits During Mandatory Stages***

*The City does not have pre-established guidelines for reduced consumption at our critical water supply condition since those would have to be set based upon the estimated reduction in water supplies. The City would obtain compliance with any rationing effort through a billing methodology that would penalize users who use more than their water allocation.*

## **SECTION VI**

### ***Excessive Use Surcharges***

*It is anticipated that excessive use surcharges on the system would be established when customers exceeding their target allocation and would be billed a 100 percent surcharge per each increment of water use that exceeds the allocation by 25 percent.*

## **SECTION VII**

### ***Analysis of Financial Impact on Revenue***

*To understand how the City plans for the financial impact of conservation, it is necessary to understand how the water rate structure was designed.*

*In April 1992 City Council adopted a water rate following extensive review by the City's Public Works Commission which is a inclined block rate with five steps. Exhibit 3 is a copy of the City Water Equity Study completed in 1992 showing the rationale for the current water rates.*

*Our water rate model is in computer form and City staff can quickly adjust the*

*variables of the rate structure so that a lower projected water consumption would generate a new rate based upon the revenue needed in the Water Enterprise fund.*

## **SECTION VIII**

### ***Ordinances and Resolutions***

*Enclosed as Exhibit 4 is a package of ordinances and resolutions adopted by the City since November 1989.*

## **SECTION IX**

### ***Tracking Mechanism to Verify Actual Reductions***

*Every service in the City is metered and read bi-monthly. Our meter readings are computerized, and within one day of meter reading the City would have the information to see if actual water reductions were occurring. From the water meter reading, adjustments and recommendations could be made if the reductions were not meeting the targeted conservation.*

# EXHIBIT 1

# PER CAPITA WATER PRODUCTION

YEAR	PRODUCTION (AC.FT.)	POPULATION	PER CAPITA WATER USE (GAL/DAY)
1972	812	4430	164
1973	797	4630	154
1974	839	4829	155
1975	901	4910	164
1976	1185	4900	216
1977	1107	4890	202
1978	1133	4970	204
1979	1120	5150	194
1980	1124	5364	187
1981	1172	5450	192
1982	1168	5650	189
1983	1183	6020	175
1984	1465	6180	212
1985	1435	6430	199
1986	1597	7130	200
1987	1691	7220	209
1988	1943	7370	235
1989	2064	7520	245
1990	1995	7669*	232
1991	1812	7822	206

15-YEAR  
AVERAGE

= 205 gpcd

\*1990 Census

# **EXHIBIT 2**

AN ORDINANCE OF THE CITY OF PISMO BEACH ADDING CHAPTER 13.06  
OF THE CITY MUNICIPAL CODE; INSTITUTING MANDATORY WATER  
CONSERVATION MEASURES

WHEREAS, the City of Pismo Beach, like all Central Coast communities depends on water supplies recharged by rainfall, and in times of drought water supplies are restricted; and

WHEREAS, municipal water supply is a critical service to the well being of the City, and all water customers should act with this knowledge in regard to the use of water; and

WHEREAS, in order to manage the City's water supply for the greatest longterm public benefit, and with particular regard to domestic use, sanitation and fire protection, it is necessary to restrict the essential uses of water within the City's service area; and

WHEREAS, the water uses prohibited and restricted by this ordinance are hereby determined to be non-essential; and

WHEREAS, it is necessary for the immediate preservation of the public peace, health, welfare, safety, comfort and convenience that the City enact mandatory water conservation measures to the fullest extent of the law, in order to ensure a continuing adequate water supply for the citizens of the City of Pismo Beach.

NOW, THEREFORE, the City Council of the City of Pismo Beach does ordain as follows:

1. In accordance with Government Code Section 36936, the City Council makes each and all of the listed findings and statements set forth above.
2. Section 13.06 is hereby added to the Municipal Code of the City of Pismo Beach as follows:

Chapter 13.06

Sections:

- 13.06.010 Chapter Purpose
- 13.06.020 Declaration of Water Supply Conditions
- 13.06.030 Normal Water Supply Condition
- 13.06.040 Moderately Restricted Water Supply Conditions
- 13.06.050 Severely Restricted Water Supply Conditions
- 13.06.060 Critical Water Supply Conditions
- 13.06.070 Penalties for Non-Compliance

MANDATORY WATER CONSERVATION MEASURES

13.06.010 Chapter Purpose.

The purpose of this Chapter is: (a) to protect the public health, safety, welfare, comfort and convenience by ensuring that the City water demand does not exceed the available supply of water; (b) to define the steps necessary to ensure sufficient water supply for human consumption, sanitation, and fire protection under all foreseeable water supply conditions; (c) to establish resource management consistent with State law, the authority of the City to implement resource management regulations and restrictions with regard to the use of water; (d) to maximize the public benefit and prevent unnecessary hardship and economic impact during periods of water shortages by matching appropriate water shortage response strategies to various levels of shortage.

It is the intent of this chapter to recognize that there may be varying durations and intensities of water shortages, and to apply water use restrictions and management techniques commensurate with the water supply.

#### 13.06.020 Declaration of Water Supply Conditions

The City Council shall from time to time adopt resolutions declaring the level of the City water supply condition, which in turn will dictate the water conservation measures in effect at any particular time within the City. The four levels of water supply conditions are: (1) normal water supply condition, (2) moderately restricted water supply condition, (3) severely restricted water supply condition, (4) critical water supply condition. Upon adoption of the required resolution, the restrictions and measures identified in this ordinance shall take affect immediately.

#### 13.06.030 Normal Water Supply Condition.

1. Outdoor water use for washing vehicles, boats, paved surfaces, buildings or other similar uses shall be attended and have hand-controlled water devices, typically including spring-loaded shutoff nozzles.
2. Outdoor irrigation resulting in excessive gutter runoff is prohibited.
3. Restaurants shall serve drinking water only in response to a specific request by a customer.

#### 13.06.040 Moderately Restricted Water Supply Conditions.

1. Use of water which results in excessive gutter runoff is prohibited.
2. Outdoor water use for washing vehicles, boats, buildings or other similar uses shall be attended and have hand-controlled watering devices, typically including spring-loaded shutoff nozzles.
3. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets, or other such uses except as found necessary by the City to protect the public health or safety.
4. Outdoor irrigation
  - a. Outdoor irrigation is prohibited between the hours of 10 a.m. and 4:00 p.m.
  - b. Irrigation of private and public landscaping, turf areas and gardens is permitted at even-numbered addresses only on Mondays and Thursdays, and at odd-numbered addresses only on Tuesdays and Fridays. All customers are directed to use no more water than necessary to maintain landscaping.
5. Restaurants shall serve drinking water only in response to a specific request by a customer.
6. Use of potable water for compaction or dust-control purposes in construction activities is prohibited.

#### 13.06.050 Severely Restricted Water Supply Conditions

1. Use of water which results in excessive gutter runoff is prohibited.
2. Outdoor water use (except irrigation)
  - a. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets, or other such use except where necessary to protect the public health and safety.
  - b. Washing cars by use of a hose is prohibited. Use of a bucket is permitted subject to non-wasteful applications.
3. Outdoor Irrigation
  - a. Outdoor irrigation is prohibited between the hours of 10 a.m. and 4:00 p.m.

- b. Irrigation of private and public landscaping, turf areas, and gardens is permitted at even-numbered addresses only on Mondays and Thursdays and at odd-numbered addresses on Tuesdays and Fridays. All customers are directed to use no more water than necessary to maintain landscaping.
4. Restaurants will serve water only in response to a specific request by a customer.
5. Emptying and refilling swimming pools and commercial spas is prohibited except to prevent structural damage and/or to provide for the public health and safety.
6. Use of potable water for compaction or dust-control purposes in construction activities is prohibited.

#### 13.06.060 Critical Water Supply Conditions

In addition to 13.06.050, the City Council may impose any water rationing requirement as it deems appropriate to protect public health, safety, welfare, comfort and convenience.

#### 13.06.070 Penalties for Non-Compliance

1. Violation of any provision of this chapter may result in termination of water service until such violation is corrected, and until all appropriate fees and penalties are paid in full.
2. An administrative procedure shall be established by resolution of the City Council from time to time for enforcement of this section. Such procedures shall include, without limitation, at least the following factors:
  - a. Provisions for notice to the alleged offender, including the furnishing of informational material and advice where appropriate.
  - b. Comprehensive guidelines for staff use in determining whether or not the offense justifies disconnection of the water service.
  - c. An opportunity for the alleged offender to be heard at the department head level or above before the water service is disconnected, except in cases of continuing deliberate water wasting.
  - d. Provisions for City recovery of all staff costs, including overhead, for any second or greater offense within any one-year period.
  - e. A schedule of additional civil administrative penalties for any third or greater offense within any one year period.
  - f. The right to appeal first to the Public Works Commission, and then to the City Council, subject to prior deposit of all fees and penalties then due and owing, plus the payment of appeal fees as established by the procedural resolution.

#### 13.06.080 Violation - a Misdemeanor

In addition to, and completely separate from, the civil enforcement provisions in this ordinance, any person who knowingly and willfully violates the provisions of this ordinance shall be guilty of a criminal misdemeanor, punishable as provided in the General Penalty provisions of the Municipal Code. All previous attempts by the City to obtain compliance by the defendant may be introduced as evidence of offender's knowledge and willfulness.

This Ordinance shall be in full force and effect thirty (30) days after its passage, and before the expiration of fifteen (15) days after the passing of this Ordinance, it shall be posted with the names of the members voting for and against the same, in three public places within the City of Pismo Beach, to wit:

1. The United States Post Office, Pismo Beach
2. The United States Post Office, Shell Beach
3. Pismo Beach City Hall

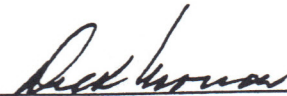
INTRODUCED at a regular meeting of the City Council held this 14th day of May, 1990, on motion of Councilmember Baker, seconded by Councilmember Foster, and on the following roll call vote, to wit:

AYES: Councilmembers Baker, Foster, Eldwayen, Fiorentino and Mayor Morrow.

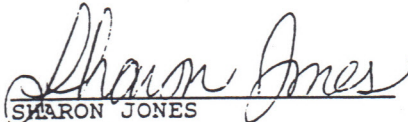
NOES: None

ABSENT: None

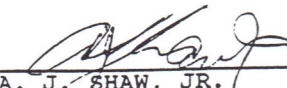
ABSTAIN: None

  
DICK MORROW, Mayor

ATTEST:

  
SHARON JONES  
City Clerk

APPROVED AS TO FORM:

  
A. J. SHAW, JR.  
City Attorney

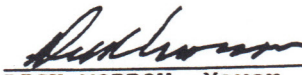
PASSED AND ADOPTED at a regular meeting of the City Council held this 29th day of May, 1990, on motion of Councilmember Fiorentino, seconded by Councilmember Eldwayen, and on the following roll call vote, to wit:

AYES: Councilmembers Fiorentino, Eldwayen, Baker, Foster and Mayor Morrow.

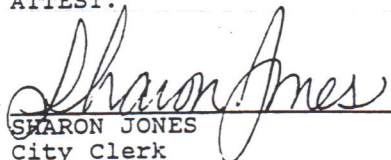
NOES: None

ABSENT: None

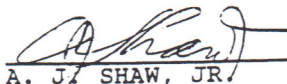
ABSTAIN: None

  
DICK MORROW, Mayor

ATTEST:

  
SHARON JONES  
City Clerk

APPROVED AS TO FORM:

  
A. J. SHAW, JR.  
City Attorney

**EXHIBIT 3**

RESOLUTION NO. R-89-127

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PISMO BEACH ESTABLISHING A WATER CONSERVATION PROGRAM TO REGULATE THE ADDITION OF NEW WATER USES; PROVIDE OFF-SITE RETRO-FIT GUIDELINES AND ADMINISTRATIVE PROCEDURES TO RECOGNIZE VARIOUS WATER RESOURCE CONSERVATION MEASURES PURSUANT TO AND IMPLEMENTING URGENCY ORDINANCE NO. O-89-19

THE CITY COUNCIL HEREBY RESOLVES:

Section 1: Intent

It is the intent of this Resolution to provide implementation guidelines and retro-fit guidelines to facilitate the administration of Urgency Ordinance No. O-89-19. This Resolution shall clarify the means by which applications may be made to the City so that development may proceed in an orderly manner consistent with the City's General Plan. It is the intent to identify herein various conservation measures that may be available to the public and various conservation measures that the Community Development Department and Public Works Department may accept and review in considering projects. The purpose of this Resolution is to facilitate a means by which any new construction building permits before the City's Community Development Department, and Building Division may be considered and issued. The urgency water conservation regulations shall apply to the application for an issuance of any building permit, which in the determination of the Community Development Director and/or City Engineer may result in increased water consumption.

Section 2: Prohibitions

Urgency Ordinance No. O-89-19 authorizes the Community Development Department to issue building permits only to those projects where it has been demonstrated to the satisfaction of the Community Development Director and/or City Engineer that the applicant can participate in and provide water conservation measures and remedies to the existing critical City water supply deficiency system that results in a proportionate decrease in the existing city water demand by reducing existing demand in proportion to proposed demand in a ratio of at least 1.5:1. This shall be interpreted as follows:

1. That applicants shall, from the City's existing demand, release through conservation and retro-fit measures 1.5 units (acre feet, cubic feet, gallons) of water for every unit (acre feet, cubic feet, gallons) of water that is required for the project.

Section 3: Consumption Values

The following values are assigned to projects within the City:

1. a. Single family residences shall consume .4 a.f.y.  
b. Multi-family residences shall consume .3 a.f.y.  
c. Hotel rooms shall require .16 a.f.y. average annual use
2. a. For each single family residential water allocation requested, the applicant shall provide a .6 a.f.y. reduction in demand.  
b. For each multi-family residential unit water allocation requested, the applicant shall provide a .45 a.f.y. reduction in demand.  
c. For each hotel room water allocation requested, the applicant shall provide a .24 a.f.y. reduction in demand.

Any other projects, or any other form of commercial or residential development shall require the submission of calculations of saving and consumption for verification by the City's Engineering department prior to issuance of permits. Each project shall provide 1.5 x the estimated annual average use of its project requirement.

Section 4: Regulative actions taken by the City pursuant to Urgency Ordinance No. O-89-13.

1. Planners shall make water conservation recommendations when reviewing and writing Environmental Impact Reports and Environmental Assessments.
2. Large water users shall develop and provide their own conservation programs at the time of application and prior to use permitting.
3. Self-closing faucets shall be installed in all public and large commercial and industrial buildings prior to issuance of permits.
4. All new construction or development shall require low water using landscapes and water efficient irrigation systems.
5. Buildings shall be internally water efficient.

Section 5: Guidelines:

- a. Low-water using plants shall be used wherever possible.
- b. The use of large areas of turf shall generally be limited to active use areas and should be that of low water using drought tolerant variety. The relationship between turf and the size of a property shall be such that no amount of turf shall be permitted that is greater than 10% of the area of the property.
- c. Existing trees and shrubs landscaped areas except turf shall be mulched in all projects. Efficient irrigation systems shall be required on all projects. The landscaped design should minimize run-off through appropriate grading and plant selection. The project shall also be reviewed for shade tree designs and windbreaks which will put in place to encourage and provide adequate shield for reducing evaporation and deny dration. All large projects shall utilize drip irrigation systems wherever feasible for shrubs. The use of sprinklers shall generally be discouraged. Wherever feasible large projects shall install ground and air moisture sensors and link them to the timing systems for the irrigation system.
- d. Water conservation devices shall be incorporated into all new development. These devices shall consist of ultra-low (1-1/2 gallon) toilets, ultra low-flow shower heads, faucets, sinks and any water outlet in any building whether residential or commercial. These regulations shall apply to any new units or additions to units in which water use would be increased. More specifically, this would mean that there shall be no addition of units without consistency with these water regulations programs.

Section 6: Exceptions:

1. Projects providing a proven assignable source of water from other than existing City supplies.

Section 7: Encouragement

Conservation Programs providing for retro-fitting of existing landscaping and/or dwellings or buildings within the City shall be encouraged. Areas which can be easily retro-fitted should include City parks, public schools, any public or governmental agency's buildings or facilities, including schools, school shower rooms; large hotels, single family & multi family homes, mobile home parks; applicants are encouraged to advertise in the newspaper requesting that people enter into an agreement with them to modify their existing plumbing systems and buildings and grounds. Various City parks, public right-of-ways shall be considered to be fine candidates for this type of retro-fit program. This resolution does not supersede any other ordinances or policies of the City except as to the manner in which water shall be provided to projects. The City's existing growth management system and other provisions shall remain in effect.

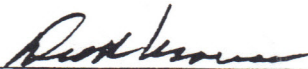
ON MOTION of Councilmember Baker, seconded by Councilmember Fiorentino, the foregoing Resolution is hereby passed and adopted this 13th day of November, 1989, by the following roll call vote, to wit:

AYES Councilmembers Baker, Fiorentino, Elcawen, Foster and Mayor Morrow

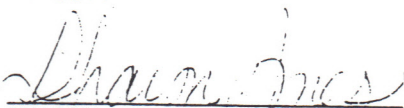
NOES: None

ABSTAIN: None


ABSENT: None

  
DICK MORROW, Mayor

ATTEST:

  
SHARON JONES  
CITY CLERK

APPROVED AS TO FORM:

  
A. J. SHAW, JR.  
CITY ATTORNEY

## **APPENDIX M – WATER CONSERVATION ORDINANCE**

## **Chapter 13.24 WATER CONSERVATION**

### **13.24.010 Purpose—Intent.**

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A. The purpose of this chapter is:

1. To protect the public health, safety, welfare, comfort and convenience by ensuring that the city water demand does not exceed the available supply of water;
2. To define the steps necessary to ensure sufficient water supply for human consumption, sanitation and fire protection under all foreseeable water supply conditions;
3. To establish resource management consistent with state law, the authority of the city to implement resource management regulations and restrictions with regard to the use of water;
4. To maximize the public benefit and prevent unnecessary hardship and economic impact during periods of water shortages by matching appropriate water shortage response strategies to various levels of shortage.

B. It is the intent of this chapter to recognize that there may be varying durations and intensities of water shortages, and to apply water use restrictions and management techniques commensurate with the water supply. (Ord. 90-10 § 2 (part), 1990: prior code § 13.06.010)

### **13.24.020 Declaration of water supply conditions.**

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A. The city council shall from time to time adopt resolutions declaring the level of the city water supply condition, which in turn will dictate the water conservation measures in effect at any particular time within the city. The four levels of water supply conditions are:

1. Normal water supply condition;
2. Moderately restricted water supply condition;
3. Severely restricted water supply condition; and
4. Critical water supply condition.

B. Upon adoption of the required resolution, the restrictions and measures identified in this chapter shall take effect immediately. (Ord. 90-10 § 2 (part), 1990: prior code § 13.06.020)

### **13.24.030 Normal water supply conditions.**

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Normal water supply conditions are typified by the following:

- A. Outdoor water use for washing vehicles, boats, paved surfaces, buildings and other similar uses shall be attended and have hand-controlled water devices, typically including spring loaded shutoff nozzles.
- B. Outdoor irrigation resulting in excessive gutter runoff is prohibited.
- C. Restaurants shall serve drinking water only in response to a specific request by a customer. (Ord. 90-10 § 2 (part), 1990: prior code § 13.06.030)

### **13.24.040 Moderately restricted water supply conditions.**

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Moderately restricted water supply conditions are typified by the following:

- A. Use of water which results in excessive gutter runoff is prohibited.
- B. Outdoor water use for washing vehicles, boats, buildings or other similar uses shall be attended and have hand-controlled watering devices, typically including spring-loaded shutoff nozzles.
- C. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets, or other such uses except as found necessary by the city to protect the public health or safety.
- D. Outdoor Irrigation.
  - 1. Outdoor irrigation is prohibited between the hours of ten a.m. and four p.m.;
  - 2. Irrigation of private and public landscaping, turf areas and gardens is permitted at even-numbered addresses only on Mondays and Thursdays and at odd-numbered addresses only on Tuesdays and Fridays. All customers are directed to use no more water than necessary to maintain landscaping.
- E. Restaurants shall serve drinking water only in response to a specific request by a customer.
- F. Use of potable water for compaction or dust control purposes in construction activities is prohibited. (Ord. 90-10 § 2 (part), 1990: prior code § 13.06.040)

#### **13.24.050 Severely restricted water supply conditions.**

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- A. Use of water which results in excessive gutter runoff is prohibited.
- B. Outdoor Water Use--Except Irrigation.
  - 1. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets or other such use except where necessary to protect the public health and safety;
  - 2. Washing cars by use of a hose is prohibited. Use of a bucket is permitted subject to non-wasteful applications.
- C. Outdoor Irrigation.
  - 1. Outdoor irrigation is prohibited between the hours of ten a.m. and four p.m.;
  - 2. Irrigation of private and public landscaping, turf areas and gardens is permitted at even-numbered addresses only on Mondays and Thursdays and at odd-numbered addresses only on Tuesdays and Fridays. All customers are directed to use no more water than necessary to maintain landscaping.
- D. Restaurants shall serve drinking water only in response to a specific request by a customer.
- E. Emptying and refilling swimming pools and commercial spas is prohibited except to prevent structural damage and/or to provide for the public health and safety.
- F. Use of potable water for compaction or dust control purposes in construction activities is prohibited. (Ord. 90-10 § 2 (part), 1990: prior code § 13.06.050)

#### **13.24.060 Critical water supply conditions.**

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In addition to the conditions specified in Section 13.24.050, the city council may impose any water rationing requirement as it deems appropriate to protect public health, safety, welfare, comfort and convenience. (Ord. 90-

10 § 2 (part), 1990: prior code § 13.06.060)

### **13.24.070 Penalties for noncompliance.**

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A. Violation of any provision of this chapter may result in termination of water service until such violation is corrected, and until all appropriate fees and penalties are paid in full.

B. An administrative procedure shall be established by resolution of the city council from time to time for enforcement of this section. Such procedures shall include, without limitation, at least the following factors:

1. Provisions for notice to the alleged offender, including the furnishing of informational material and advice where appropriate;
2. Comprehensive guidelines for staff use in determining whether or not the offense justifies disconnection of the water service;
3. An opportunity for the alleged offender to be heard at the department head level or above before the water service is disconnected, except in cases of continuing deliberate water wasting;
4. Provisions for city recovery of all staff costs, including overhead, for any second or greater offense within any one-year period;
5. A schedule of additional civil administrative penalties for any third or greater offense within any one year period;
6. The right to appeal first to the public works commission, and then to the city council, subject to prior deposit of all fees and penalties then due and owing, plus the payment of appeal fees as established by the procedural resolution. (Ord. 90-10 § 2 (part), 1990: prior code § 13.06.070)

### **13.24.080 Violation--Penalty.**

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In addition to, and completely separate from, the civil enforcement provisions of the ordinance codified in this chapter, any person who knowingly and wilfully violates the provisions of this chapter shall be guilty of a criminal misdemeanor as provided in the general penalty provisions of this code. All previous attempts by the city to obtain compliance by the defendant may be introduced as evidence of the offender's knowledge and wilfulness. (Ord. 90-10 § 2 (part), 1990: prior code § 13.06.080)

**Disclaimer:**

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 1.800.445.5588.

## **APPENDIX N – WATER QUALITY REPORT (2009)**

# *The City of Pismo Beach Water System met all Federal and State standards for drinking water during 2009.*

## **WHERE THE RESIDENTS AND CONSUMERS OF PISMO BEACH GET THEIR WATER.**

### **Surface Water**

Lopez Lake - The City is entitled to receive 896 acre feet per year, approximately 292 million gallons of water.

### **State Water**

The City is entitled to receive 1100 acre feet per year, approximately 358 million gallons of water.

### **Groundwater**

Arroyo Grande Aquifer - The City is entitled to extract 700 acre feet per year, approximately 228 million gallons of water.

**How Much Water Do We Use?** In 2009, The residents and visitors of Pismo Beach used approximately 2057 acre feet or 654 Million Gallons.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

**WATER CONSERVATION REMINDER  
AVOID WASTEFUL USE**

## **Contaminants that may potentially be present in untreated source water, surface water and well water include:**

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

## **CITY OF PISMO BEACH**

Customer Service: (805) 773-4656  
Date of Report: June 1, 2010  
Period Covered: Jan. 1, 2009 to Dec. 31, 2009

## **CONSUMER CONFIDENCE REPORT**

PRE-SORT STANDARD  
U.S. POSTAGE  
**PAID**  
PISMO BEACH, CA  
93449  
PERMIT NO. 2  
ECRWSS



**RESIDENTIAL CUSTOMER  
PISMO BEACH, CA. 93449**

## 2009 Water Quality Data for Lopez Treatment Plant/State Water Project

**T**ables 1, 2, 3, 4, 5, 6, and 7 list all of the drinking water contaminants that were detected from **January 2009 through December 2009**, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, although representative, may be more than one year old. Water quality data for State water was provided by the Central Coast Water Authority.

### Contaminants with a Primary Drinking Water Standard

**Table 1 - Treatment of surface water sources**

Turbidity Performance Standard – Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system Turbidity of combined filter effluent water must: 1. Be less than or equal to 0.3 NTU in 95% of measurements in a month 2. Not exceed 1.0 NTU for more than eight consecutive hours.	Treatment Technique for Lopez Project Conventional Treatment	Treatment Technique for Central Coast Water Authority (State Water) Conventional Treatment
Lowest monthly percentage of samples that met Turbidity Performance Standard 1.	99.5%	100%
Highest single turbidity measurement during the year.	0.15	0.04-0.12
The number of violations of any surface water treatment requirement.	0	0

**Table 2 - Microbiological Contaminant's**

Contaminant (reporting units)	MCL	PHG (MCLG) or (MRDLG)	Range	Average	Range	Average	Range	Average	Potential Source of Contamination
Total Coliform Bacteria (MPN/100mL)	>5.0% of monthly samples are positive	(0)	ND-1.6% (a,d)	0%-0.16% (a)		0	0-2.3%	0.2%	Naturally present in the environment.
Turbidity (NTU)	TT=1NTU	----	0.04-1.4(a)	0.10-0.09(a)	0.018-0.15(b)	0.029 (b)	ND	ND	Surface water runoff.
Heterotrophic plate count (CFU/mL)	TT = adequate disinfection	(0)	ND-115 ND-310 (a)	4-9(a)	ND-1	ND	0-1	0.3	Naturally present in the environment.
Fecal Coliform and E.coli (ppb)	---	0	--	--			0 Positives	0 Positives	Human and animal fecal waste.

**Table 3 - Inorganic Contaminants**

Aluminum (ppb)	1	0.6	ND-0.100	ND		ND	ND-340	129	Erosion of natural deposits; residue from some surface water treatment processes.
Arsenic (ppb)	10	0.004		2		2.7	ND	ND	Runoff from orchards; natural deposits.
Fluoride (ppb)	2.0	1.0		0.307		0.397	.1	.1	Erosion of natural deposits.

**Table 4 - Radioactive Contaminants**

Gross Beta Particle Activity (pCi/L)	15	----	7.3	7.3	ND-1.93 (2005)	0.8 (2005)	NC	NC	Erosion of natural deposits
--------------------------------------	----	------	-----	-----	----------------	------------	----	----	-----------------------------

**Table 5 - Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors - FEDERAL RULE**

Contaminant (reporting units)	MCL	PHG (MCLG) or (MRDLG)	Range	Average	Range	Average	Range	Average	Potential Source of Contamination
Total Trihalomethanes (ppb)	RAA = 80	----	21-27 20-41 (a,c)	24 34 (a,c)			46.0-65.0	54.6	By-product of drinking water chlorination.
Haloacetic Acids (ppb)	RAA = 60	----	10-12 10-38.4 (a,c)	11 17 (a,c)	10-16	13	7.3-14.0	11.0	By-product of drinking water disinfection.
Total Chlorine Residual (ppm)	MRDL = 4.0 as Cl <sub>2</sub>	[4]	0.60-4.4 (e) 0.85-3.2 (a,c)	2.3 2.4 (a,c)	0.48-5.2 (e)	2.2	1.1-2.9	2.0	Drinking water disinfectant added for treatment.
Chlorite (ppm)	1.0	0.05	0.28-0.74 ND-0.69 (a)	0.54 0.49 (a)	ND-0.98	0.72	ND	ND	By product of drinking water disinfectant.
Chlorite (ppb)	RAA=800	----	130-360 (a)	170 230 (a)	190-510	310	ND	ND	By product of drinking water disinfectant.
Chlorine Dioxide (ppb)	MRDL 800 as ClO <sub>2</sub>	[800]	ND-440 (a)	ND 160 (a)	ND-420	ND	ND	ND	Drinking water disinfectant added for treatment.

**Table 6 - Detection of Contaminants with a Secondary Drinking Water Standard**

Aluminum (ppb)	200	----	ND-100	ND		ND			Residue from some surface water treatment processes.
Chloride (ppm)	500	NA	10.3-43.4	41.8	24.9-26.1	25.5	37-147	101	Runoff/leaching from natural deposits.
Color (CU)	15	----		3		1	ND	ND	Naturally occurring organic materials.
Corrosivity (LI)	Noncorrosive	----	ND	ND	ND	ND	noncorrosive	noncorrosive	Balance of hydrogen, carbon and oxygen in water; affected by temperature and other factors.
Iron (ppb)	300	NA	100				ND	ND	Leaching from natural deposits; industrial waste.
Manganese (ppb)	50	NA	20				ND	ND	Leaching from natural deposits.
Odor - Threshold (TON)	3	----	1-3 1-6 (a, f)	1.7 1.6	ND-6 (f)	2	1	1	Naturally occurring organic materials.
Specific Conductance (µS/cm)	1600	----	690-700	700	700-710	705	231-786	561	Runoff/leaching from natural deposits.
Sulfate (ppm)	500	----	101-103	102	107-111	109	63	63	Runoff/leaching from natural deposits.
Turbidity (NTU)	5	----	0.04-1.4 (a)	0.10 0.09 (a)	0.018-0.15 (b)	0.029 (b)	0.04-0.2	.06	Soil Runoff.
Total Dissolved Solids (ppm)	1000	----	410-450	430		450	131-493	362	Runoff/leaching from natural deposits.

**Table 7 - Detection of Contaminants without a Drinking Water Standard**

Alkalinity as CaCO <sub>3</sub> (ppm)	----	----	160-250	220	250-280	270	52-94	75	Runoff/leaching from natural deposits; seawater influence.
Calcium (ppm)	----	----	55-61	58	67-68	68	30-76	56	Runoff/leaching from natural deposits; seawater influence.
Hardness as CaCO <sub>3</sub> (ppm)	----	----	190-370	260	320-330	330	60-164	117	Generally found in ground and surface water.
Magnesium (ppm)	----	----	33-34	34		39	17	17	Runoff/leaching from natural deposits; seawater influence.
pH	----	----	8.16-8.26	8.21	8.07-8.29	8.18	7.5-9.0	8.2	Runoff/leaching from natural deposits; seawater influence.
Potassium (ppm)	NA	NA	----	----			3.5	3.5	Runoff/leaching from natural deposits; seawater influence.
Sodium (ppm)	----	----	38-40	39	28-29	29	77	77	Runoff/leaching from natural deposits; seawater influence.
Total Organic Carbon (f) (TOC) (ppm)	TT	NA	0.30				1.2-3.4	2.2	Various natural and manmade sources.

## 2009 WATER QUALITY DATA FOR PISMO BEACH

**Table #1 - DISTRIBUTION SYSTEM WATER SAMPLING RESULTS SHOWING DETECTION OF COLIFORM BACTERIA**

Contaminants	Highest No. of Detections	No. of Months In Violation	MCL	MCLG	Typical Source of Contaminant
Total Coliform Bacteria	0	0	More than 1 positive monthly sample	0	Naturally present in the environment.
Fecal Coliform Bacteria Or <i>E. coli</i>	0	0	A routine sample and a repeat sample are total Coliform positive, and once is also fecal Coliform or <i>E. coli</i> positive	0	Human and animal fecal waste.

**Table #2 - 2005 HOME SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Contaminants (CCR UNITS)	No. of Samples	90th Percentile Level Detected	No. of Sites Exceeding RAL	RAL	Typical Source of Contaminant
LEAD (ppm)	20	0.00	0	15	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
COPPER (ppm)	20	0.68	0	1.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

## GROUND WATER SAMPLING TEST RESULTS FOR DETECTION OF CONTAMINANTS

TABLE #3			WELL #5		WELL #23		PRIMARY DRINKING WATER STANDARDS
CONTAMINANT	M.C.L. (µg/l)	MCLG PHG	RANGE	AVERAGE	RANGE	AVERAGE	POTENTIAL CONTAMINATION SOURCE
Arsenic (ppb)	10	0	3.8	3.8	2.1	2.1	Erosion of natural deposits
Nitrate (as No3 (mg/L)	45	45	ND	ND	7.08	7.08	Runoff from fertilizers; sewage from humans and animals
Zinc	5000	NA	ND	ND	140	140	Improper waste disposal
Gross Alpha Particle Activity (pCi/l)	15	(0)	8.54	8.54	4.18	4.18	Erosion of natural deposits
Uranium	20	0.5	4.03	4.03	4.38	4.38	Erosion of natural deposits
			WELL #5		WELL #23		SECONDARY DRINKING WATER STANDARDS
CONTAMINANT	M.C.L.		RANGE	AVERAGE	RANGE	AVERAGE	POTENTIAL CONTAMINATION SOURCE
ORGANIC CONTAMINANTS							
Chloride (mg/l)	500		77	77	85	85	Runoff; leaching from natural deposits; seawater
Iron	300		120	120	ND	ND	Natural or industrial
Manganese (mg/l)	50		31	31	35	35	Natural or industrial
Magnesium (mg/l)	NS		49	49	59	59	Runoff; leaching from natural deposits, seawater
Sulfate (mg/l)	500		170	170	300	300	Runoff; leaching from natural deposits; industrial
Total Dissolved Solids	1000		710	710	820	820	Soil runoff; leaching from natural deposits
Toluene	150		0-22	0	0	0	Discharge from petroleum and chemical factories; underground gas tank leaks.
Fluoride	2.0		0.10	0.10	0.20	0.10	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
			WELL #5		WELL #23		WITHOUT A DRINKING WATER STANDARD
CONTAMINANT			RANGE	AVERAGE	RANGE	AVERAGE	POTENTIAL CONTAMINATION SOURCE
Total Alkalinity as CaCO <sub>3</sub> (ppb)			360	360	280	280	Runoff; leaching from natural deposits; seawater
Calcium (ppm)			110	110	130	130	Runoff; leaching from natural deposits; seawater
Sodium (ppm)			50	50	79	79	Runoff; leaching from natural deposits; seawater
DISTRIBUTION SYSTEM							
VOLITILE ORGANIC CONTAMINANTS			RANGE	AVERAGE	MCL	(MCLG)	
Total Trihalomethanes (ppb)			26-52	34	80	NA	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)			7-27	18	60	NA	By-product of drinking water chlorination
ADDITIONAL ANALYSIS							
Aggressiveness Index			12-13	13	NS	NA	NA
Specific Conductance (micromhos)			1200-1300	1250	1600	NA	Substances that form ions when in water; seawater influence
Total Hardness (ppm) (as CaCO <sub>3</sub> )			470-500	50	450	450	Generally found in ground and surface water
pH (units)			7.1-8.4	8.2	6.5-8.5	NA	NA
Turbidity (NTU)*****			0-0.3	0.1	5	NA	Soil runoff

\*\*\*\*\*Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

**Table #7 - WELL SAMPLING RESULTS SHOWING DETECTION OF UNREGULATED CHEMICALS**

	Avg. Level Detected	Range of Detections Low - High	MCL	RAL	Typical Source of Contaminant
UNREGULATED CHEMICALS					
BORON (ppb)	250	ND-300	NS	1000	Naturally-occurring element found in soil and water in the form of boric acid and sodium tetraborate
VANADIUM (ppb)	4.5	ND-6.7	NS	50	Naturally-occurring. Has been found in association with hazardous waste sites.

## FOR THE WEB BROWSERS: [www.pismobeach.org](http://www.pismobeach.org)

EPA/CDC Provides guidelines on appropriate means to the risk of infection by Cryptosporidium and other microbial contaminants, for information call - Safe Drinking Water Hotline (1-800-426-4791).

This hotline operates from 9 a.m. to 5 p.m. EST, Monday through Friday.

For more information contact:

- The Office of Ground Water and Drinking at EPA  
<http://www.epa.gov/OGWDW/>
- American Water Works Association <http://www.awwa.org>
- County Board of Supervisors  
<http://www.slonet.org/vv/ipslocao/agendas.html>

### *You can Provide Input Regarding Water Quality Decisions in your Area.*

- A vulnerability assessment of well #5 and #23 has been completed.
- The drinking water source assessment and protection program was completed in September 2002, both are on file at the Water Department.
- The public can address concerns to the Public Works Water Department. Contact Tom Hembree at (805) 773-7054 for information.
- The City Council meets the first and third Tuesday of each month at City Hall.
- Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

### State and Lopez Water Footnotes:

- Distribution system samples
- Combined Filter Effluent turbidity monitoring is used as an indicator of filtration performance.
- Compliance based on the running annual average of samples computed quarterly.
- TOCs are taken at the treatment plant's combined filter effluent.

## DEFINITIONS:

<b>Maximum Contaminant Level (MCL)</b>	The highest level of contaminant that is allowed in drinking water.
<b>Maximum Contaminant Level Goal (MCLG) and Public Health Goal (PHG)</b>	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the United States Environmental Protection Agency and PHGs are set by the California Environmental Protection Agency.
<b>Maximum Residual Disinfectant Level (MRDL)</b>	The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.
<b>Maximum Residual Disinfectant Level Goal (MRDLG)</b>	The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.
<b>Primary Drinking Water Standards (PDWS)</b>	MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.
<b>Secondary Drinking Water Standards (SDWS)</b>	MCLs for contaminants to protect the taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect health at the MCL levels.
<b>Treatment Technique (TT)</b>	A required process intended to reduce the level of a contaminant in drinking water.
<b>Regulatory Notification Level (NL)</b>	The concentration of a contaminant that, if exceeded, triggers treatment or other requirement which a water system must follow.
<b>Running Annual Average (RAA)</b>	An arithmetic average of all samples is computed quarterly. This quarterly average is then averaged against the previous three quarters worth of data to provide an annual running average. The highest running average over a twelve month period used for compliance.
<b>Not Collected (NC)</b>	A sample was not collected for this contaminant.
<b>Not Reported (NR)</b>	Contaminant was not reported.
<b>No Standard (NS)</b>	Contaminant for which there is no established MCL.
<b>Not Detected (ND)</b>	Contaminant is not detectable at testing limit.
<b>Not Analyzed (NA)</b>	Contaminant was not analyzed.
<b>WAIVED</b>	On September 4, 2007, the CDPH granted a TOC waiver to the Lopez WTP. The facility upgraded to Membrane Treatment.
<b>pCi/L</b>	PICOCURIES PER LITER (A MEASURE OF RADIOACTIVITY)
<b>ppm</b>	PARTS PER MILLION, OR MILLIGRAMS PER LITER (mg/L)
<b>ppb</b>	PARTS PER BILLION, OR MICROGRAMS PER LITER (µg/L)
<b>µS/cm</b>	MICROMHOS PER CENTIMETER (UNIT OF SPECIFIC ONDUCTANCE OF WATER)
<b>CU</b>	COLOR UNITS
<b>NS</b>	NO STANDARD
<b>CFU/ml</b>	COLONY FORMING UNITS PER MILLILITER
<b>NTU</b>	NEPHELOMETRIC TURBIDITY UNIT
<b>TON</b>	THRESHOLD ODOR NUMBER
<b>LI</b>	LANGELIER INDEX; NONCORROSIVE = ANY POSITIVE VALUE, CORROSIVE = ANY NEGATIVE VALUE
<b>LopezWTP</b>	LOPEZ WATER TREATMENT PLANT
<b>CCWA</b>	CENTRAL COAST WATER AUTHORITY
<b>PPWTP</b>	POLONIO PASS WATER TREATMENT PLANT

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

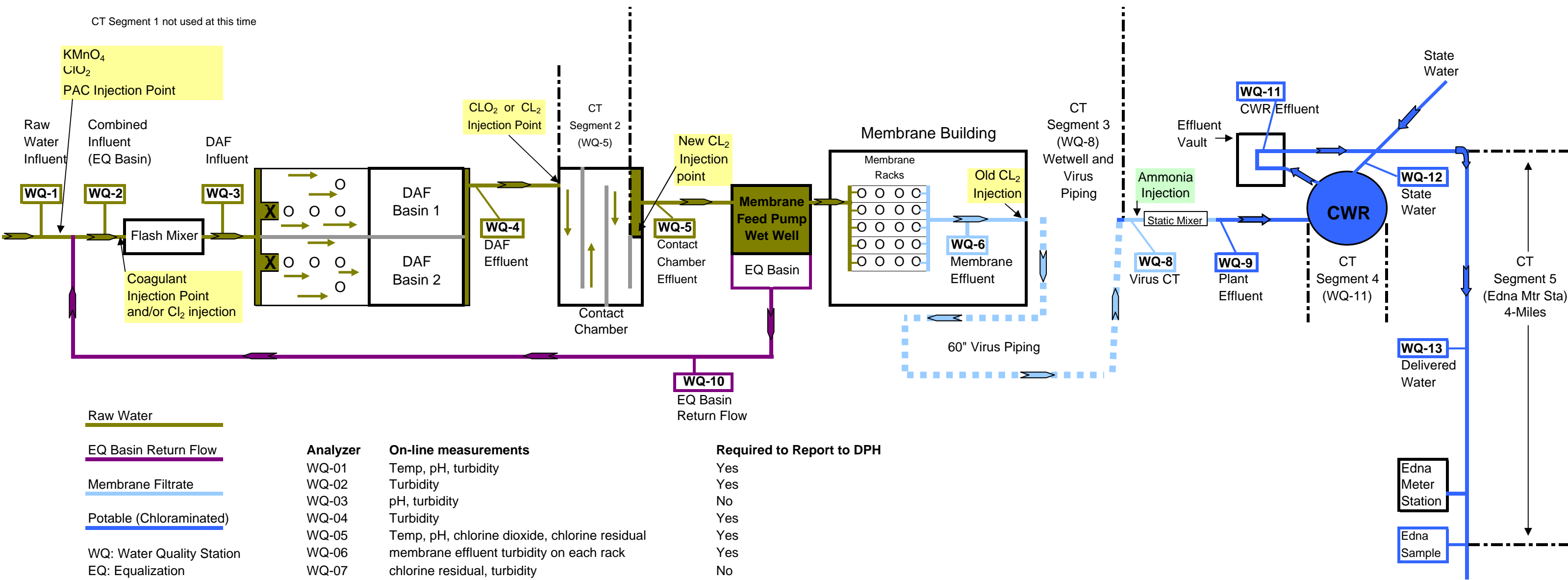
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

★ More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system deficiencies, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers.

## **APPENDIX O – LOPEZ WATER TREATMENT PLANT PROCESS FLOW MAP**

LOPEZ WATER TREATMENT PLANT: WATER QUALITY STATIONS / CT SEGMENTS



Analyzer	On-line measurements	Required to Report to DPH
WQ-01	Temp, pH, turbidity	Yes
WQ-02	Turbidity	Yes
WQ-03	pH, turbidity	No
WQ-04	Turbidity	Yes
WQ-05	Temp, pH, chlorine dioxide, chlorine residual	Yes
WQ-06	membrane effluent turbidity on each rack	Yes
WQ-07	chlorine residual, turbidity	No
WQ-08	Temp, pH, chlorine residual, turbidity	Yes
WQ-09	chlorine residual, chlorite, chlorine dioxide residual	Yes
WQ-10	pH, turbidity	Yes
WQ-11	chlorine residual, turbidity	No
WQ-12	chlorine residual, turbidity	No
WQ-13	Temp, pH, chlorine residual, turbidity	Yes, if problem

**APPENDIX P – SAN LUIS OBISPO COUNTY  
CORRESPONDENCE ON STATE WATER PROJECT DELIVERY  
PROJECTIONS**



May 12, 2011

Ms. Courtney Howard  
County of San Luis Obispo  
Public Works Department  
1050 Monterey Street, Suite 207  
San Luis Obispo, California 93408-6000

Subject: Central Coast Water Authority  
2010 Urban Water Management Plan Update

L. J. Lavagnino  
Chairman

Richard Shaikewitz  
Vice Chairman

William J. Brennan  
Executive Director

Brownstein Hyatt  
Farber Schreck  
General Counsel

*Member Agencies*

City of Buellton

Carpinteria Valley  
Water District

City of Guadalupe

City of Santa Barbara

City of Santa Maria

Goleta Water District

Montecito Water District

Santa Ynez River Water  
Conservation District,  
Improvement District #1

*Associate Member*

La Cumbre Mutual  
Water Company

Dear Ms Howard:

The California Urban Water Management Planning Act requires every urban water supplier to prepare and adopt an Urban Water Management Plan (UWMP). An urban water supplier is defined as a public water system supplying 3,000 customers or delivering 3,000 acre-feet annually. The Central Coast Water Authority (CCWA) is classified as a wholesale urban water supplier. As such, CCWA is required to prepare an UWMP and is also required to provide projections of the volume of water to be delivered in the future to the retail urban water suppliers for a range of water-year types.

CCWA staff has reviewed the Department of Water Resources (DWR) report entitled "The State Water Project Delivery Reliability Report 2009" and obtained reliability data from DWR that is specific to San Luis Obispo County. Following the estimation protocol described in the UWMP Guidelines and the DWR Reliability Report, CCWA prepared an estimated projection for future water deliveries for a variety of water-year types. This estimate is attached for your use. An excel file will also be emailed to you separately for your use in developing your own projections, if you need to utilize different scenarios than provided in the CCWA estimate.

If you have any question, please call me at 805-688-2292, ext 228.

Sincerely,

A handwritten signature in black ink, appearing to read "John Brady", is written over a circular stamp.

John Brady  
Operations Manager/Engineer

cc: Syllas Cranor

255 Industrial Way  
Buellton, CA 93427-9565  
(805) 688-2292  
FAX: (805) 686-4700



**Table 1 CCWA Table A Reliability Estimate**

Year	Long Term Average	Single Dry Year 1977	2-year drought 1990-1991	4-year drought 1929-1932	4-year drought 1989-1992	6-year drought 1987-1992
2010	64%	6%	24%	34%	36%	34%
2015	63%	7%	24%	34%	35%	33%
2020	62%	8%	24%	35%	34%	32%
2025	61%	9%	24%	35%	34%	32%
2030	61%	10%	24%	36%	33%	31%
2035	60%	11%	24%	36%	32%	30%

**Table 2 Maximum Table A Amount in Selected Drought Conditions**

Drought Condition	2010	2015	2020	2025	2030	2035
Long Term Average	3,074	3,037	3,000	2,963	2,926	2,889
Single Dry Year 1977	270	317	365	413	461	509
2-year drought 1990-1991	1,152	1,151	1,151	1,150	1,150	1,150
4-year drought 1929-1932	1,627	1,651	1,675	1,698	1,722	1,746
4-year drought 1989-1992	1,728	1,691	1,655	1,619	1,582	1,546
6-year drought 1987-1992	1,629	1,597	1,566	1,535	1,504	1,473

**San Luis Obispo County**

Contractor Table A Amount:	4,830
----------------------------	-------

### Current Conditions, 2009

	1 yr drought	2 yr drought	4 yr drought	6 yr drought
1922	74%			
1923	60%	67%		
1924	19%	39%		
1925	46%	32%	49%	
1926	51%	48%	44%	
1927	77%	64%	48%	54%
1928	59%	68%	58%	52%
1929	28%	43%	53%	46%
1930	39%	33%	50%	50%
1931	30%	34%	39%	47%
1932	38%	34%	34%	45%
1933	39%	38%	36%	39%
1934	30%	34%	34%	34%
1935	67%	49%	43%	40%
1936	64%	66%	50%	45%
1937	89%	77%	63%	54%
1938	100%	94%	80%	65%
1939	61%	81%	79%	69%
1940	62%	61%	78%	74%
1941	88%	75%	78%	77%
1942	80%	84%	73%	80%
1943	80%	80%	77%	78%
1944	47%	63%	74%	70%
1945	75%	61%	70%	72%
1946	68%	71%	67%	73%
1947	63%	66%	63%	69%
1948	55%	59%	65%	65%
1949	60%	58%	62%	61%
1950	53%	57%	58%	62%
1951	77%	65%	61%	63%
1952	96%	86%	71%	67%
1953	65%	80%	73%	68%

### Future Conditions, 2029

	1 yr drought	2 yr drought	4 yr drought	6 yr drought
1922	64%			
1923	61%	63%		
1924	20%	41%		
1925	42%	31%	47%	
1926	52%	47%	44%	
1927	72%	62%	46%	52%
1928	64%	68%	57%	52%
1929	33%	49%	55%	47%
1930	41%	37%	53%	51%
1931	30%	35%	42%	49%
1932	39%	34%	36%	46%
1933	39%	39%	37%	41%
1934	32%	35%	35%	36%
1935	66%	49%	44%	41%
1936	66%	66%	51%	45%
1937	81%	73%	61%	54%
1938	100%	90%	78%	64%
1939	45%	72%	73%	65%
1940	63%	54%	72%	70%
1941	75%	69%	71%	72%
1942	64%	69%	62%	71%
1943	74%	69%	69%	70%
1944	50%	62%	66%	62%
1945	75%	62%	66%	67%
1946	59%	67%	64%	66%
1947	57%	58%	60%	63%
1948	58%	58%	62%	62%
1949	56%	57%	58%	59%
1950	59%	58%	58%	61%
1951	74%	67%	62%	61%
1952	82%	78%	68%	64%
1953	57%	70%	68%	64%

1954	57%	61%	74%	68%
1955	51%	54%	67%	66%
1956	88%	69%	65%	72%
1957	48%	68%	61%	67%
1958	100%	74%	71%	68%
1959	48%	74%	71%	65%
1960	54%	51%	63%	65%
1961	66%	60%	67%	67%
1962	55%	60%	56%	62%
1963	73%	64%	62%	66%
1964	62%	68%	64%	60%
1965	75%	68%	66%	64%
1966	62%	68%	68%	65%
1967	80%	71%	70%	68%
1968	64%	72%	70%	69%
1969	100%	82%	76%	74%
1970	77%	89%	80%	76%
1971	55%	66%	74%	73%
1972	59%	57%	73%	72%
1973	70%	64%	65%	71%
1974	87%	79%	68%	75%
1975	72%	79%	72%	70%
1976	56%	64%	71%	66%
1977	6%	31%	55%	58%
1978	89%	47%	55%	63%
1979	77%	83%	57%	64%
1980	91%	84%	66%	65%
1981	49%	70%	76%	61%
1982	100%	74%	79%	69%
1983	100%	100%	85%	84%
1984	77%	89%	82%	82%
1985	67%	72%	86%	81%
1986	87%	77%	83%	80%
1987	38%	62%	67%	78%
1988	21%	30%	53%	65%
1989	70%	45%	54%	60%
1990	21%	45%	37%	51%

1954	58%	58%	68%	64%
1955	43%	50%	60%	62%
1956	82%	62%	60%	66%
1957	54%	68%	59%	63%
1958	92%	73%	68%	64%
1959	49%	70%	69%	63%
1960	47%	48%	60%	61%
1961	53%	50%	60%	63%
1962	66%	59%	54%	60%
1963	58%	62%	56%	61%
1964	64%	61%	60%	56%
1965	67%	66%	64%	59%
1966	62%	65%	63%	62%
1967	81%	72%	69%	66%
1968	55%	68%	66%	65%
1969	100%	78%	75%	72%
1970	69%	84%	76%	72%
1971	59%	64%	71%	71%
1972	57%	58%	71%	70%
1973	66%	62%	63%	68%
1974	74%	70%	64%	71%
1975	69%	72%	67%	66%
1976	62%	66%	68%	65%
1977	10%	36%	54%	56%
1978	78%	44%	55%	60%
1979	69%	73%	55%	60%
1980	83%	76%	60%	62%
1981	57%	70%	72%	60%
1982	95%	76%	76%	65%
1983	100%	98%	84%	80%
1984	77%	89%	82%	80%
1985	68%	72%	85%	80%
1986	79%	73%	81%	79%
1987	26%	52%	62%	74%
1988	30%	28%	51%	63%
1989	59%	44%	48%	56%
1990	19%	39%	34%	47%

1991	27%	24%	35%	44%
1992	26%	26%	36%	34%
1993	80%	53%	38%	41%
1994	47%	63%	45%	45%
1995	92%	69%	61%	49%
1996	80%	86%	75%	59%
1997	87%	83%	76%	68%
1998	96%	92%	89%	80%
1999	77%	87%	85%	80%
2000	59%	68%	80%	82%
2001	33%	46%	66%	72%
2002	74%	54%	61%	71%
2003	56%	65%	56%	66%
Min	6%	24%	34%	34%

Long Term Average: 64%

1991	28%	24%	34%	40%
1992	24%	26%	33%	31%
1993	66%	45%	34%	38%
1994	57%	62%	44%	42%
1995	85%	71%	58%	47%
1996	66%	75%	68%	54%
1997	81%	73%	72%	63%
1998	83%	82%	78%	73%
1999	71%	77%	75%	74%
2000	65%	68%	75%	75%
2001	30%	48%	62%	66%
2002	67%	49%	58%	66%
2003	58%	62%	55%	62%
Min	10%	24%	33%	31%

Long Term Average: 61%

## **APPENDIX Q – CUWCC BMP ANNUAL REPORTS**

# BMP 1 Coverage Requirement Status

Reporting Unit ID 6979 Rep Unit Name: City of Pismo Beach

Date MOU Signed: 12/8/2004 Reporting Period: 05-06 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: Yes

RU filed an exemption for this BMP during report period: No exemption request filed

If exemption filed, type: \_\_\_\_\_

## Exhibit 1 Coverage Requirement

An agency must meet three conditions to satisfy strict compliance for BMP 1.

Condition 1: Adopt survey targeting and marketing strategy on time

Condition 2: Offer surveys to 20% of SF accounts and 20% of MF units during report period

Condition 3: Be on track to survey 15% of SF accounts and 15% of MF units within 10 years of implementation start date.

### Test For Condition 1

Latest Year RU to Implement Targeting/Marketing Program: 2006

	Single Family	Multi Family
Year RU Reported Implementing Targeting/Marketing Program:	_____	_____
RU Met Targeting/Marketing Coverage Requirement:	_____	_____

### Test For Condition 2

	Single Family	Multi Family
Latest Year Survey Program to Start: <u>2005</u>	<u>0.00%</u>	<u>0.00%</u>
Select a Reporting Period: <u>05-06</u>	<u>No</u>	<u>No</u>

Res Survey Offers (%)

Survey Offers 20%

### Test For Condition 3

#### Completed Residential Surveys

	Single Family	Multi Family
Total Completed Surveys through 2006	<u>0</u>	<u>0</u>
Credit for Surveys Completed Prior to Implementation of Reporting Database	_____	_____
Total + Credit	<u>0</u>	<u>0</u>
Res. Accounts in Base Year	<u>3,521</u>	<u>287</u>
RU Survey Coverage as % of Base Year Res Accounts	<u>0.00%</u>	<u>0.00%</u>
Coverage Requirement by Year 1 of Implementation per Exhibit 1	<u>0.70%</u>	<u>0.70%</u>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>No</u>	<u>No</u>

## BMP 1 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

# BMP 2 Coverage Requirement Status

Reporting Unit ID	<input type="text" value="6979"/>	Rep Unit Name:	<u>City of Pismo Beach</u>
Date MOU Signed:	<u>12/8/2004</u>	Reporting Period:	<u>05-06</u>
		Rep Unit Category:	<u>Retail Only</u>
RU indicated "At least as effective as" implementation during report period:		<u>Yes</u>	
RU filed an exemption for this BMP during report period:		<u>No exemption request filed</u>	
If exemption filed, type:		<u></u>	

## Exhibit 1 Coverage Requirement

An agency must meet **one** of three conditions to satisfy strict compliance for BMP 2.

Condition 1: The agency has demonstrated that 75% of SF accounts and 75% of MF units constructed prior to 1992 are fitted with low-flow showerheads.

Condition 2: An enforceable ordinance requiring the replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts is in place for the agency's service area.

Condition 3: The agency has distributed or directly installed low-flow showerheads and other low-flow plumbing devices to not less than 10% of single-family accounts and 10% of multi-family units constructed prior to 1992 during the reporting period.

## Test For Condition 1

Report Year	Report Period	Single Family		Multi Family	
		Reported Saturation	Saturation 75%?	Reported Saturation	Saturation 75%?
1999	99-00				
2000	99-00				
2001	01-02				
2002	01-02				
2003	03-04				
2004	03-04				
2005	05-06	90	Yes	90	Yes
2006	05-06	90	Yes	90	Yes
2007	07-08	90	No	90	Yes
2008	07-08	90	No	90	No

# BMP 2 Coverage Requirement Status

---

## Test For Condition 2

RU has ordinance  
requiring showerhead  
retrofit?

Report Year	Report Period	
1999	99-00	
2000	99-00	
2001	01-02	
2002	01-02	
2003	03-04	
2004	03-04	
2005	05-06	Yes
2006	05-06	No
2007	07-08	Yes
2008	07-08	No

## Test For Condition 3

1992 SF Accounts	Num. Showerheads Distributed to SF Accounts	Single Family Coverage Ratio	SF Coverage Ratio 10%
0	0	?	Yes
1992 MF Accounts	Num. Showerheads Distributed to MF Accounts	Multi Family Coverage Ratio	MF Coverage Ratio 10%
0	0	?	Yes

---

## BMP 2 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

---

# BMP 3 Coverage Requirement Status

Reporting Unit ID	<input type="text" value="6979"/>	Rep Unit Name: <u>City of Pismo Beach</u>
Date MOU Signed: <u>12/8/2004</u>	Reporting Period: <u>05-06</u>	Rep Unit Category: <u>Retail Only</u>
RU indicated "At least as effective as" implementation during report period: <u>Yes</u>		
RU filed an exemption for this BMP during report period: <u>No exemption request filed</u>		
If exemption filed, type: _____		

## Exhibit 1 Coverage Requirement

An agency must meet one of two conditions to be in compliance with BMP 3:

Condition 1: Perform a prescreening audit. If the result is equal to or greater than 0.9 nothing more needs be done.

Condition 2: Perform a prescreening audit. If the result is less than 0.9, perform a full audit in accordance with AWWA's Manual of Water Supply Practices, Water Audits, and Leak Detection.

RU operates a water distribution system: Yes

## Tests For Conditions 1 and 2

Report Year	Report Period	Pre Screen Completed	Pre Screen Result	Full Audit Indicated	Full Audit Completed
<a href="#">1999</a>	<a href="#">99-00</a>				
<a href="#">2000</a>	<a href="#">99-00</a>				
<a href="#">2001</a>	<a href="#">01-02</a>				
<a href="#">2002</a>	<a href="#">01-02</a>				
<a href="#">2003</a>	<a href="#">03-04</a>				
<a href="#">2004</a>	<a href="#">03-04</a>				
<a href="#">2005</a>	<a href="#">05-06</a>	No	?		No
<a href="#">2006</a>	<a href="#">05-06</a>	No			No
<a href="#">2007</a>	<a href="#">07-08</a>	No	?		No
<a href="#">2008</a>	<a href="#">07-08</a>	No	?		No

## BMP 3 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

# BMP 4 Coverage Requirement Status

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Reporting Unit ID	<input type="text" value="6979"/>	Rep Unit Name:	<u>City of Pismo Beach</u>
Date MOU Signed:	<u>12/8/2004</u>	Reporting Period:	<u>05-06</u>
		Rep Unit Category:	<u>Retail Only</u>
RU indicated "At least as effective as" implementation during report period:		<u>No</u>	
RU filed an exemption for this BMP during report period:		<u>No exemption request filed</u>	
If exemption filed, type:		<u></u>	

## Exhibit 1 Coverage Requirement

For agencies signing the MOU prior to December 31, 1997:

100% of existing unmetered accounts to be metered and billed by volume of use by July 1, 2009.

For agencies signing the MOU after December 31, 1997:

100% of existing unmetered accounts to be metered and billed by volume of use by July 1, 2012  
OR within six years of signing the MOU (whichever date is later). All retrofits must be completed no later than one year prior to the requirements of state law (January 1, 2025).

## Tests For Compliance

Total Meter Retrofits Reported through 2006	<u>0</u>
No. of Unmetered Accounts in Base Year	<u>0</u>
Meter Retrofit Coverage as % of Base Year Unmetered Accounts	<u>No Unmetered Accounts</u>
Coverage Requirement by Year 1 of Implementation	<input type="text" value="25.0%"/>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>Yes</u>

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## BMP 4 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

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# BMP 5 Coverage Requirement Status

Reporting Unit ID	<u>6979</u>	Rep Unit Name:	<u>City of Pismo Beach</u>
Date MOU Signed:	Reporting Period:	Rep Unit Category:	
<u>12/8/2004</u>	<u>05-06</u>	<u>Retail Only</u>	

RU filed an exemption for this BMP during report period: No exemption request filed  
If exemption filed, type: \_\_\_\_\_

RU indicated "At least as effective as" implementation during report period: Yes

## Exhibit 1 Coverage Requirement

An agency must meet three conditions to comply with BMP 5.

Condition 1: Develop water budgets for 90% of its dedicated landscape meter accounts within four years of the date implementation is to start.

Condition 2: (a) Offer landscape surveys to at least 20% of its CII accounts with mixed use meters each report cycle and be on track to survey at least 15% of its CII accounts with mixed use meters within 10 years of the date implementation is to start OR (b) Implement a dedicated landscape meter retrofit program for CII accounts with mixed use meters or assign landscape budgets to mixed use meters.

Condition 3: Implement and maintain customer incentive program(s) for irrigation equipment retrofits.

## Test For Condition 1

Report Year	Report Period	BMP 5 Implementation Year	No. of Irrigation Meter Accounts	No. of Irrigation Accounts with Budgets	Budget Coverage Ratio	90% Coverage Met by Year 4
1999	99-00	-7				NA
2000	99-00	-6				NA
2001	01-02	-5				NA
2002	01-02	-4				NA
2003	03-04	-3				NA
2004	03-04	-2				NA
2005	05-06	-1	720	0	0.00	NA
2006	05-06	0	733	0	0.00	NA
2007	07-08	1	163	0	0.00	NA
2008	07-08	2	132	0	0.00	NA

## Test For Condition 2a (survey offers)

Select Reporting Period: 05-06

Large Landscape Survey Offers as % of Mixed Use Meter CII Accounts: 0.0%

Survey Offers Equal or Exceed 20% Coverage Requirement: No

# BMP 5 Coverage Requirement Status

## Test For Condition 2a (surveys completed)

Total Completed Landscape Surveys Reported through 2006	0
Credit for Surveys Completed Prior to Implementation of Reporting Database	
Total + Credit	0
CII Accounts with Mixed Use Meters in Base Year	0
RU Survey Coverage as % of Base Year CII Accounts	?
Coverage Requirement by Year 0 of Implementation per Exhibit 1	0.0%
RU on Schedule to Meet 10 Year Coverage Requirement	

## Test For Condition 2b (mixed use budget or meter retrofit program)

Report Year	Report Period	BMP 5 Implementation Year	Agency has mix-use budget program	No. of mixed-use budgets
1999	99-00	-7		
2000	99-00	-6		
2001	01-02	-5		
2002	01-02	-4		
2003	03-04	-3		
2004	03-04	-2		
2005	05-06	-1	no	0
2006	05-06	0	no	0
2007	07-08	1	no	0
2008	07-08	2	no	0

Report Year	Report Period	BMP 4 Implementation Year	No. of mixed use CII accounts	No. of mixed use CII accounts fitted with irrig. meters
1999	99-00	-6		
2000	99-00	-5		
2001	01-02	-4		
2002	01-02	-3		
2003	03-04	-2		
2004	03-04	-1		
2005	05-06	0	338	0
2006	05-06	1	338	0
2007	07-08	2	15	15
2008	07-08	3	17	17

# BMP 5 Coverage Requirement Status

## Test For Condition 3

Report Year	Report Period	BMP 5 Implementation Year	RU offers financial incentives?	<u>Loans</u>		<u>Grants</u>		<u>Rebates</u>	
				No.	Total Amount	No.	Total Amount	No.	Total Amount
1999	99-00	-7							
2000	99-00	-6							
2001	01-02	-5							
2002	01-02	-4							
2003	03-04	-3							
2004	03-04	-2							
2005	05-06	-1	no	0	0	0	0	0	0
2006	05-06	0	no	0	0	0	0	0	0
2007	07-08	1	no	0	0	0	0	0	0
2008	07-08	2	no	0	0	0	0	0	0

## BMP 5 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

# BMP 6 Coverage Requirement Status

Reporting Unit ID	<input type="text" value="6979"/>	Rep Unit Name: <u>City of Pismo Beach</u>
Date MOU Signed: <u>12/8/2004</u>	Reporting Period: <u>05-06</u>	Rep Unit Category: <u>Retail Only</u>
RU indicated "At least as effective as" implementation during report period:		<u>No</u>
RU filed an exemption for this BMP during report period:		<u>No exemption request filed</u>
If exemption filed, type:		<u></u>

## Pre-2004 Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 6.

Condition 1: Offer a cost-effective financial incentive for high-efficiency washers if one or more energy service providers in service area offer financial incentives for high-efficiency washers.

## Revised Exhibit 1 Coverage Requirement

An agency must meet two conditions to comply with BMP 6.

Condition 1: Offer cost-effective financial incentives for high-efficiency washers with Water Factors of 9.5 or less.

Condition 2: Meet Coverage Goal ( $CG = \text{Total Dwelling Units} \times 0.0768$ ) by July 1, 2008. Agencies signing the MOU after July 1, 2003, shall have a prorated Coverage Goal, based on implementation period of less than 4.0 years.

### Test For Condition 1

Agency offered cost-effective financial incentives for high-efficiency washers with Water Factors of 9.5 or less: no

### Test For Condition 2

Coverage Goal:	<u>223</u>
Total Coverage Points Awarded (incl. past credit):	<u>0</u>
% of Coverage Goal:	<u>0.0%</u>

## BMP 6 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

# BMP 7 Coverage Requirement Status

Reporting Unit ID

6979

Rep Unit Name:

City of Pismo Beach

Date MOU Signed:

12/8/2004

Reporting Period:

05-06

Rep Unit Category:

Retail Only

RU indicated "At least as effective as" implementation during report period:

No

RU filed an exemption for this BMP during report period:

No exemption request filed

If exemption filed, type:

## Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 7.

Condition 1: Implement and maintain a public information program consistent with BMP 7's definition.

### Test For Condition 1:05-06

Report Year	Report Period	BMP 7 Implementation Year	RU Has Public Information Program
1999	99-00	-6	
2000	99-00	-5	
2001	01-02	-4	
2002	01-02	-3	
2003	03-04	-2	
2004	03-04	-1	
2005	05-06	0	No
2006	05-06	1	No
2007	07-08	2	No
2008	07-08	3	No

## BMP 7 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

# BMP 8 Coverage Requirement Status

Reporting Unit ID

6979

Rep Unit Name:

City of Pismo Beach

Date MOU Signed:

12/8/2004

Reporting Period:

05-06

Rep Unit Category:

Retail Only

RU indicated "At least as effective as" implementation during report period:

No

RU filed an exemption for this BMP during report period:

No exemption request filed

If exemption filed, type:

## Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 8.

Condition 1: Implement and maintain a school education program consistent with BMP 8’s definition.

### Test For Condition 1

Report Year	Report Period	BMP 8 Implementation Year	RU Has School Education Program
1999	99-00	-6	
2000	99-00	-5	
2001	01-02	-4	
2002	01-02	-3	
2003	03-04	-2	
2004	03-04	-1	
2005	05-06	0	No
2006	05-06	1	No
2007	07-08	2	No
2008	07-08	3	No

## BMP 8 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

# BMP 9 Coverage Requirement Status

Reporting Unit ID	<u>6979</u>	Rep Unit Name:
Date MOU Signed:	Reporting Period:	<u>City of Pismo Beach</u>
<u>12/8/2004</u>	<u>05-06</u>	Rep Unit Category:
		<u>Retail Only</u>

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed  
If exemption filed, type: \_\_\_\_\_

## Exhibit 1 Coverage Requirement

An agency must meet two conditions to comply with BMP 9.

Condition 1: Agency has identified and ranked by use commercial, industrial, and institutional accounts.

Condition 2(a): Agency is on track to survey 10% of commercial accounts, 10% of industrial accounts, and 10% of institutional accounts within 10 years of date implementation to commence.

OR

Condition 2(b): Agency is on track to reduce CII water use by an amount equal to 10% of baseline use within 10 years of date implementation to commence.

OR

Condition 2(c): Agency is on track to meet the combined target as described in Exhibit 1 BMP 9 documentation.

## Test For Condition 1

Ranked Commercial Customers **yes**

Ranked Industrial Customers **no**

Ranked Institutional Customers **yes**

Rank Coverage Met **No**

## Test For Condition 2a

	Commercial	Industrial	Institutional
Total Completed Surveys Reported through <b>2006</b>	<u>0</u>	<u>0</u>	<u>0</u>
Credit for Surveys Completed Prior to Implementation of Reporting Database	<u></u>	<u></u>	<u></u>
Total + Credit	<u>0</u>	<u>0</u>	<u>0</u>
CII Accounts in Base Year	<u>657</u>	<u>63</u>	<u>65</u>
RU Survey Coverage as % of Base Year CII Accounts	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Coverage Requirement by Year <b>0</b> of Implementation per Exhibit 1	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>

# BMP 9 Coverage Requirement Status

## Test For Condition 2b

Coverage Year	Performance Target Savings (AF/Yr)	Performance Target Savings Coverage	Performance Target Savings Coverage Requirement	Coverage Requirement Met
2006	0	0%	0.5%	No
2007	0	0%	1%	No
2008	0	0%	1.7%	No
2009		0%	2.4%	No
2010		0%	3.3%	No
2011		0%	4.2%	No
2012		0%	5.3%	No
2013		0%	6.4%	No
2014		0%	7.7%	No
2015		0%	9%	No

## Test For Condition 2c

Total BMP 9 Surveys + Credit	0
BMP 9 Survey Coverage	0.0%
BMP 9 Performance Target Coverage	0.0%
BMP 9 Survey + Performance Target Coverage	0.0%
Combined Coverage Equals or Exceeds BMP 9 Survey Coverage Requirement?	Yes

## BMP 9 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

# BMP 11 Coverage Requirement Status

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Reporting Unit ID	<div>6979</div>	Rep Unit Name:	<div>City of Pismo Beach</div>
Date MOU Signed:	Reporting Period:	Rep Unit Category:	
<div>12/8/2004</div>	<div>05-06</div>	<div>Retail Only</div>	

RU indicated "At least as effective as" implementation during report period: 

No

RU filed an exemption for this BMP during report period: 

No exemption request filed

If exemption filed, type:

## Exhibit 1 Coverage Requirement

Agency shall maintain rate structure consistent with BMP 11's definition of conservation pricing.

### Test For Compliance

Fully metered?	Yes
Water Coverage Met?	No
Provide Sewer Service?	
Sewer Coverage Met?	No

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## BMP 11 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

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## BMP 11 Sewer Coverage Status Summary

Agency does not provide sewer service

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# BMP 12 Coverage Requirement Status

Reporting Unit ID

6979

Rep Unit Name:

City of Pismo Beach

Date MOU Signed:

12/8/2004

Reporting Period:

05-06

Rep Unit Category:

Retail Only

RU indicated "At least as effective as" implementation during report period:

Yes

RU filed an exemption for this BMP during report period:

No exemption request filed

If exemption filed, type:

## Exhibit 1 Coverage Requirement

Agency shall staff and maintain the position of conservation coordinator and provide support staff as necessary.

## Test For Compliance

Report Year	Report Period	Conservation Coordinator Position Staffed?	Total Staff on Team (incl. CC)
1999	99-00		
2000	99-00		
2001	01-02		
2002	01-02		
2003	03-04		
2004	03-04		
2005	05-06	no	0
2006	05-06	no	0
2007	07-08	no	0
2008	07-08	no	0

## BMP 12 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

# BMP 13 Coverage Requirement Status

Reporting Unit ID

6979

Rep Unit Name:

City of Pismo Beach

Date MOU Signed:

12/8/2004

Reporting Period:

05-06

Rep Unit Category:

Retail Only

RU indicated "At least as effective as" implementation during report period:

Yes

RU filed an exemption for this BMP during report period:

No exemption request filed

If exemption filed, type:

## Exhibit 1 Coverage Requirement

Implementation methods shall be enacting and enforcing measures prohibiting gutter flooding, single pass cooling systems in new connections, non-recirculating systems in all new conveyer car wash and commercial laundry systems, and non-recycling decorative water fountains.

## Test For Compliance

Agency or service area prohibits:							RU has ordinance that meets coverage requirement
Report Year	Gutter Flooding	Single-Pass Cooling Systems	Single-Pass Car Wash	Single-Pass Laundry	Single-Pass Fountains	Other	
1999							
2000							
2001							
2002							
2003							
2004							
2005	yes	no	yes	yes	no	yes	No
2006	yes	no	yes	yes	no	yes	No
2007	yes	no	yes	yes	no	no	No
2008	yes	no	yes	yes	no	no	No

## BMP 13 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

# BMP 14 Coverage Requirement Status

Reporting Unit ID: 6979

Rep Unit Name:

City of Pismo Beach

Base Year: 2004

Rep Unit Category:

Retail Only

## Exhibit 1 Coverage Requirement

An agency must meet one of the following conditions to be in compliance with BMP 14.

Condition 1: Retrofit-on-resale (ROR) in effect in service area

Condition 2: Water savings from toilet replacement programs equal to 90% of Exhibit 6 coverage requirement.

An agency with an exemption for BMP 14 is not required to meet one of the above conditions.

The report treats an agency with missing base year data required to compute the Exhibit 6 coverage requirement as out of compliance with BMP 14.

Coverage Year	BMP 14 Data Submitted to CUWCC	Exemption Filed with CUWCC	ALA EA	ROR Ordinance in Effect	Exhibit 6 Coverage Req'mt (AF)	Toilet Replacement Program Water Savings (AF)
2006	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
2007	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
2008	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
2009	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0
2010	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0
2011	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2012	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2013	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2014	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2015	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	

## BMP 14 Coverage Status Summary: 2010

Water supplier has met the coverage requirements for this BMP.

**Water Supply & Reuse**

Reporting Unit:

**City of Pismo Beach**

Year:

**2005****Water Supply Source Information**

<b>Supply Source Name</b>	<b>Quantity (AF) Supplied</b>	<b>Supply Type</b>
Lake Lopez Water	896	Local Watershed
State Water	558.52	Imported
Well Water	686.99	Groundwater

**Total AF: 2141.51**

Reported as of 6/30/10

## Accounts & Water Use

Reporting Unit Name:  
**City of Pismo Beach**

Submitted to  
CUWCC  
03/07/2008

Year:  
**2005**

What is the reporting year?	Fiscal	Month Ending	June
<b>A. Service Area Population Information:</b>			
1. Total service area population	8716		
<b>B. Number of Accounts and Water Deliveries (AF)</b>			
Type	Metered	Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts
			Water Deliveries (AF)
1. Single-Family	3605	978	0
2. Multi-Family	0	0	0
3. Commercial	704	889	0
4. Industrial	48	11	0
5. Institutional	65	78	0
6. Dedicated Irrigation	0	0	0
7. Recycled Water	0	0	0
8. Other	0	0	0
9. Unaccounted	NA	0	NA
<b>Total</b>	4422	1956	0
	<b>Metered</b>	<b>Unmetered</b>	

Reported as of 6/30/10

## BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2005**

### A. Implementation

- Based on your signed MOU date, 12/08/2004, your Agency STRATEGY DUE DATE is: 12/08/2006
- Has your agency developed and implemented a targeting/marketing strategy for SINGLE-FAMILY residential water use surveys? no
  - If YES, when was it implemented?
- Has your agency developed and implemented a targeting/marketing strategy for MULTI-FAMILY residential water use surveys? no
  - If YES, when was it implemented?

### B. Water Survey Data

**Survey Counts:**

**Single Family Multi-Family**

	Accounts	Units
1. Number of surveys offered:	0	0
2. Number of surveys completed:	0	0
<b>Indoor Survey:</b>		
3. Check for leaks, including toilets, faucets and meter checks	no	no
4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary	no	no
5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary	no	no
<b>Outdoor Survey:</b>		
6. Check irrigation system and timers	no	no
7. Review or develop customer irrigation schedule	no	no
8. Measure landscaped area (Recommended but not required for surveys)	no	no
9. Measure total irrigable area (Recommended but not required for surveys)	no	no
10. Which measurement method is typically used (Recommended but not required for surveys)		None
11. Were customers provided with information packets that included evaluation results and water savings recommendations?	no	no
12. Have the number of surveys offered and completed, survey results, and survey costs been tracked?	no	no
a. If yes, in what form are surveys tracked?		None
b. Describe how your agency tracks this information.		

### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict waterconservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

### D. Comments

City Council resolutions and ordinances can be furnished upon request.

Reported as of 6/30/10

**BMP 02: Residential Plumbing Retrofit**

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2005**

**A. Implementation**

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? yes

a. If YES, list local jurisdictions in your service area and code or ordinance in each:

City of Pismo Beach Ordinance O-90-10, "Instituting Mandatory Water Conservation Measures"

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? yes

3. Estimated percent of single-family households with low-flow showerheads: 90%

4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? yes

5. Estimated percent of multi-family households with low-flow showerheads: 90%

6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

Urgency ordinances and resolutions required retrofitting in the late 80's and early 90's before these formal BMP's were put into effect. The estimates are consistent with former City officials approximations.

**B. Low-Flow Device Distribution Information**

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? no

a. If YES, when did your agency begin implementing this strategy?

b. Describe your targeting/ marketing strategy.

Reminders in monthly newsletters and bill stuffers

<b>Low-Flow Devices Distributed/ Installed</b>	<b>SF Accounts</b>	<b>MF Units</b>
2. Number of low-flow showerheads distributed:	0	0
3. Number of toilet-displacement devices distributed:	0	0
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed:	0	0
6. Does your agency track the distribution and cost of low-flow devices?		no

a. If YES, in what format are low-flow devices tracked?

b. If yes, describe your tracking and distribution system :

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation

fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with water conservation fixtures in order to obtain a building permit. Strict water conservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built out and this affluent coastal community is constantly upgrading residential units due to the high value of housing in this area.

#### D. Comments

City Council resolutions and ordinances can be furnished upon request.

Reported as of 6/30/10

### BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2005**

#### A. Implementation

1. Does your agency own or operate a water distribution system? yes
2. Has your agency completed a pre-screening system audit for this reporting year? no
3. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:
  - a. Determine metered sales (AF) 0
  - b. Determine other system verifiable uses (AF) 0
  - c. Determine total supply into the system (AF) 0
  - d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. 0.00
4. Does your agency keep necessary data on file to verify the values entered in question 3? no
5. Did your agency complete a full-scale audit during this report year? no
6. Does your agency maintain in-house records of audit results or completed AWWA M36 audit worksheets for the completed audit which could be forwarded to CUWCC? no
7. Does your agency operate a system leak detection program? yes
  - a. If yes, describe the leak detection program:
 

If we cannot find a leak we hire a leak detection company to investigate and determine the probable location. Then we excavate and repair the leak.

#### B. Survey Data

1. Total number of miles of distribution system line. 52.5
2. Number of miles of distribution system line surveyed. 0

#### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

For many years the City has compared the amount of water supplied versus the amount of water sold. The difference, representing the unaccounted for water is approximately less than 10%. The unaccounted water is attributed to water line flushing, fires and fire drills and leakage. This is considered to be within acceptable limits and leakage audits and similar measures are not considered to be cost effective to the rate payers. We have a very aggressive meter replacement program that includes upgrading to Metron meters which are very accurate in low flow situations. They are scheduled for replacement every 12 to 15 years.

## D. Comments

## Voluntary Questions (Not used to calculate compliance)

---

### E. Volumes

	Estimated	Verified
1. Volume of raw water supplied to the system:		
2. Volume treated water supplied into the system:		2151.4
3. Volume of water exported from the system:	0	0
4. Volume of billed authorized metered consumption:		1952
5. Volume of billed authorized unmetered consumption:	0	0
6. Volume of unbilled authorized metered consumption:	0	0
7. Volume of unbilled authorized unmetered consumption:	0	0

### F. Infrastructure and Hydraulics

1. System input (source or master meter) volumes metered at the entry to the:		Distribution System
2. How frequently are they tested and calibrated?		0
3. Length of mains:	52.5	52.5
4. What % of distribution mains are rigid pipes (metal, ac, concrete)?	50	
5. Number of service connections:		4475
6. What % of service connections are rigid pipes (metal)?	15	15
7. Are residential properties fully metered?		yes
8. Are non-residential properties fully metered?		yes
9. Provide an estimate of customer meter under-registration:		
10. Average length of customer service line from the main to the point of the meter:	15	15
11. Average system pressure:		75
12. Range of system pressures:		From 35 to 150
13. What percentage of the system is fed from gravity feed?		50
14. What percentage of the system is fed by pumping and re-pumping?		50

**G. Maintenance Questions**

1. Who is responsible for providing, testing, repairing and replacing customer meters? Utility
2. Does your agency test, repair and replace your meters on a regular timed schedule? yes
  - a. If yes, does your agency test by meter size or customer category?: Meter Size
    - b. If yes to meter size, please provide the frequency of testing by meter size:
      - Less than or equal to 1"
      - 1.5" to 2"
      - 3" and Larger
    - c. If yes to customer category, provide the frequency of testing by customer category:
      - SF residential
      - MF residential
      - Commercial
      - Industrial & Institutional
3. Who is responsible for repairs to the customer lateral or customer service line? Utility
4. Who is responsible for service line repairs downstream of the customer meter? Customer
5. Does your agency proactively search for leaks using leak survey techniques or does your utility reactively repair leaks which are called in, or both? both
6. What is the utility budget breakdown for:
 

Leak Detection	\$ 5,000
Leak Repair	\$ 15,000
Auditing and Water Loss Evaluation	\$ 500
Meter Testing	\$ as needed

**H. Comments**

please refer to comments in section C

Reported as of 6/30/10

## BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status: **100% Complete**      Year: **2005**

**A. Implementation**

1. Please fill out the following matrix:

Types of Billed Accounts	% Accounts Metered	% Accounts Measured (Not Metered)	% Accounts Volumetric Billing
Treated Water SF Residential Accounts	100		100
Treated Water MF	100		100

## Residential Accounts

Treated Water Commercial Accounts	100		100
Treated Water Industrial Accounts	100		100
Treated Water Institutional Accounts	100		100
Raw Water Residential Deliveries	0	0	0
Raw Water Non-Residential Deliveries	0	0	0

## 2. If your agency does not meter 100% of all treated water accounts:

- a. Does your agency have a plan or program for retrofitting existing unmetered treated water connections? No
- b. By what date would 100% of all treated water accounts be metered? 2008
- c. Number of previously unmetered accounts fitted with meters during report year: 0

## 3. If your agency does not bill 100% of all treated water accounts by volume of use:

- a. By what date (Year must be four digit mm/dd/yyyy) will all customers with meters be billed by volume of use? 2008

## 4. If your agency does not meter or measure 100% of all raw water delivery fields (as listed in quesiton 1f &amp; 1g), does your agency intend to develop a program for measuring all raw water deliveries? No

## 5. If your agency does not volumetrically bill 100% of all raw water delivery, does your agency intend to develop a program for billing all raw water deliveries by volume of use? No

## 6. Does your agency meter by volume of use all municipal or governmental accounts?: Yes

- a. If no, which types of accounts are not included:

## 7. Does your agency bill by volume of use all municipal or governmental accounts? No

- a. If no, which types of accounts are not included:

## Street Sweeping

**B. Feasibility Study**

## 1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? no

- a. If YES, when was the feasibility study conducted? (mm/dd/yy)

- b. Describe the feasibility study:

## 2. Number of CII accounts with mixed-use meters: 338

## 3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period 0

**D. "At Least As Effective As"**

1. Is your agency implementing an "at least as effective as" variant of this BMP? No
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

### E. Comments

We began billing for institutional/government metered accounts in December 2007.

## BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:	BMP Form Status:	Year:
<b>City of Pismo Beach</b>	<b>100% Complete</b>	<b>2005</b>

### A. Water Use Budgets

- |  |     |
|--|-----|
| 1. Number of Dedicated Irrigation Meter Accounts:  | 720 |
| 2. Number of Dedicated Irrigation Meter Accounts with Water Budgets:                       | 0   |
| 3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF):                     | 0   |
| 4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF):                       | 2   |
| 5. Does your agency provide water use notices to accounts with budgets each billing cycle? | no  |

### B. Landscape Surveys

- |  |    |
|--|----|
| 1. Has your agency developed a marketing / targeting strategy for landscape surveys? | no |
| a. If YES, when did your agency begin implementing this strategy?                    |    |
| b. Description of marketing / targeting strategy:                                    |    |
| 2. Number of Surveys Offered.  | 0  |
| 3. Number of Surveys Completed.  | 0  |
| 4. Indicate which of the following Landscape Elements are part of your survey:       |    |
| a. Irrigation System Check   | no |
| b. Distribution Uniformity Analysis  | no |
| c. Review / Develop Irrigation Schedules   | no |
| d. Measure Landscape Area  | no |
| e. Measure Total Irrigable Area  | no |
| f. Provide Customer Report / Information   | no |
| 5. Do you track survey offers and results?   | no |
| 6. Does your agency provide follow-up surveys for previously completed surveys?      | no |
| a. If YES, describe below:   |    |

### C. Other BMP 5 Actions

1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? no
2. Number of CII mixed-use accounts with landscape budgets. 0
3. Do you offer landscape irrigation training? no
4. Does your agency offer financial incentives to improve landscape water use efficiency? no

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	0	0
b. Loans	0	0	0
c. Grants	0	0	0
5. Do you provide landscape water use efficiency information to new customers and customers changing services?			No

a. If YES, describe below:

6. Do you have irrigated landscaping at your facilities? yes
  - a. If yes, is it water-efficient? yes
  - b. If yes, does it have dedicated irrigation metering? yes
7. Do you provide customer notices at the start of the irrigation season? no
8. Do you provide customer notices at the end of the irrigation season? no

#### D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

Reminders in monthly newsletters and bill stuffers. In addition banner installed reminding residents that every drop counts.

#### E. Comments

See comments in section D.

Reported as of 6/30/10

### BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2005**

#### A. Coverage Goal

	Single Family	Multi-Family
1. Number of <b>residential</b> dwelling units in the agency service area.	3,593	284

2. Coverage Goal = Total Dwelling Units x 0.048 = 223 Points

## B. Implementation

1. Does your agency offer rebates for **residential** high-efficiency washers? no

HEW Water Factor	Number of Financial Incentives Issued	Total Value of Financial Incentives			TOTAL	POINTS AWARDED
		Retail Water Agency	Wholesaler/ Grants (if applicable)	Energy Utility (if applicable)		
2. Greater than 8.5 but not exceeding 9.5 (1 point)	0	\$ 0	\$ 0	\$ 0	\$ 0	0
3. Greater than 6.0 but not exceeding 8.5 (2 points)	0	\$ 0	\$ 0	\$ 0	\$ 0	0
4. Less than or equal to 6.0 (3 points)	0	\$ 0	\$ 0	\$ 0	\$ 0	0
<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## C. Past Credit Points

**For HEW incentives issued before July 1, 2004, select ONE of the following TWO options:**

- Method One: Points based on HEW Water Factor
- Method Two: Agency earns 1 point for each HEW.

NOTE: Agency shall not receive credit for any HEW incentives where the agency did not provide a financial incentive of \$25 or more.

### Method One: Points based on HEW Water Factor

HEW Water Factor	Number of Financial Incentives Issued	Total Value of Financial Incentives			TOTAL	POINTS AWARDED
		Retail Water Agency	Wholesaler/ Grants (if applicable)	Energy Utility (if applicable)		
1. Greater than 8.5 but not exceeding 9.5 (1 point each)	0	\$ 0	\$ 0	\$ 0	\$ 0	0
2. Greater than 6.0 but not exceeding 8.5 (2 points each)	0	\$ 0	\$ 0	0 \$ 0	\$ 0	0
3. Less than or equal to 6.0 (3 points each)	0	\$ 0	\$ 0	\$ 0	\$ 0	0

### Method Two: Agency earns 1 point for each HEW

	Number of Financial Incentives Issued	Total Value of Water Agency Financial Incentives	POINTS AWARDED
4. Total HEWs			

installed

<b>PAST CREDIT TOTALS:</b>	<b>0</b>	<b>0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$ 0</b>	<b>0</b>
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**D. Rebate Program Expenditures**

1. Average or Estimated Administration and Overhead \$ 0
2. Is the financial incentive offered per HEW at least equal to the marginal benefits of the water savings per HEW? yes

**E. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**F. Comments****BMP 07: Public Information Programs**

Reporting Unit:	BMP Form Status:	Year:
<b>City of Pismo Beach</b>	<b>100% Complete</b>	<b>2005</b>

**A. Implementation**

1. How is your public information program implemented?  
No public information program being implemented
2. Describe the program and how it's organized:
3. Indicate which and how many of the following activities are included in your public information program:

Public Information Program Activity in Retail Service Area	Yes/No	Number of Events
a. Paid Advertising	no	
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	no	
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	no	
f. Special Events, Media Events	no	
g. Speaker's Bureau	no	
h. Program to coordinate with other government agencies, industry and public interest groups and media	no	

**B. Conservation Information Program Expenditures**

1. Annual Expenditures (Excluding Staffing) 0

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

## D. Comments

Reported as of 6/30/10

**BMP 08: School Education Programs**

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2005****A. Implementation**

1. How is your public information program implemented?

No public information program being implemented

2. Please provide information on your region-wide school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
-------	--	----------------------------	-------------------------	----------------------------

Grades K-3rd

Grades 4th-6th

Grades 7th-8th

High School

4. Did your Agency's materials meet state education framework requirements?

no

5. When did your Agency begin implementing this program?

**B. School Education Program Expenditures**

1. Annual Expenditures (Excluding Staffing)

0

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**D. Comments**

Reported as of 6/30/10

**BMP 09: Conservation Programs for CII Accounts**

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2005****A. Implementation**

1. Has your agency identified and ranked COMMERCIAL customers according to use?

yes

2. Has your agency identified and ranked INDUSTRIAL customers according to use?

no

3. Has your agency identified and ranked INSTITUTIONAL customers according to use?

yes

**Option A: CII Water Use Survey and Customer Incentives Program**

4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? If so, please describe activity during reporting period: no

<b>CII Surveys</b>	<b>Commercial Accounts</b>	<b>Industrial Accounts</b>	<b>Institutional Accounts</b>
a. Number of New Surveys Offered	0	0	0
b. Number of New Surveys Completed	0	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0
<b>CII Survey Components</b>	<b>Commercial Accounts</b>	<b>Industrial Accounts</b>	<b>Institutional Accounts</b>
e. Site Visit	no	no	no
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no
<b>Agency CII Customer Incentives</b>	<b>Budget (\$/Year)</b>	<b># Awarded to Customers</b>	<b>Total \$ Amount Awarded</b>
h. Rebates	0	0	0
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

### Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option? no

6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings? no

7. **System Calculated** annual savings (AF/yr):

<b>CII Programs</b>	<b># Device Installations</b>
a. Ultra Low Flush Toilets	
b. Dual Flush Toilets	
c. High Efficiency Toilets	
d. High Efficiency Urinals	
e. Non-Water Urinals	
f. Commercial Clothes Washers (coin-op only; not industrial)	

- g. Cooling Tower Controllers
- h. Food Steamers
- i. Ice Machines
- j. Pre-Rinse Spray Valves
- k. Steam Sterilizer Retrofits
- l. X-ray Film Processors

8. **Estimated** annual savings (AF/yr) from agency programs not including the devices listed in Option B. 7., above:

CII Programs	Annual Savings (AF/yr)
a. Site-verified actions taken by agency:	
b. Non-site-verified actions taken by agency:	

## B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

## C. "At Least As Effective As"

1. Is your agency implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

## D. Comments

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict waterconservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

## BMP 11: Conservation Pricing

Reporting Unit:	BMP Form	
City of Pismo Beach	Status:	Year:
	100%	2005
	Complete	

## A. Implementation

### Water Service Rate Structure Data by Customer Class

Number of schedules:      Use of classification:

For the following accounts, how many rate schedules does agency offer/use? This agency:

1. <b>Single-family residential</b>	1	Uses classification in its billing system
2. <b>Multi-family residential</b>	0	Includes customers in another class
3. <b>Commercial</b>	1	Uses classification in its billing system

4. <b>Industrial</b>	0	Includes customers in another class
5. <b>Institutional/ government</b>	0	Includes customers in another class
6. <b>Dedicated irrigation</b> (potable water)	0	Includes customers in another class
7. <b>Other</b>	0	Includes customers in another class
8. <b>Recycled-reclaimed water</b>	0	Does not offer this type of water
9. <b>Raw water</b> (urban use)	0	Does not offer this type of water
10. <b>Wholesale</b> (urban use)	0	Does not offer this type of water

**Sewer Service**

11. Does your agency provide sewer service to your water customers?	yes
12. If yes, does sewer service use conservation rate structures?	no
13. Has your agency made the required efforts (as prescribed in BMP 11) to have sewer services billed on conservation rates?	yes
14. What water agency activities have been undertaken during the reporting period to achieve waste water agency volumetric billing in your water agency service area?	None

**B. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?	No
---	----

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**C. Comments****BMP 11: Conservation Pricing**

Reporting Unit: **City of Pismo Beach**      BMP Form Status: **100% Complete**      Year: **2005**

**1.A. Single-Family Residential Rate Schedule A**

a. Water Rate Structure	Increasing Block
b. Sewer Rate Structure	Non-volumetric Flat Rate
c. Total Revenue from only Volumetric Charges	569881
d. Total Revenue from Non-Volumetric Charges (Includes fixed fees, surcharges, minimum usage charges, monthly service charges, meter charges etc.)	461701
e. Total Revenue from this category	1031582

**1.A. Rate Schedule - Volumetric**

**Title:** Single Family Resident

f. Billing Cycles/year	12
g. Service Charges/Cycle	21.53
h. Gallons/Bill Unit	0
i. Minimum Use/Cycle	0
j. Non-billed Units (included in monthly service charge)	0

	<b>\$/Bill Unit</b>	<b>Starting At (unit qty.)</b>
k. Tier 1	1.27	0
l. Tier 2	1.61	16
m. Tier 3	0	0
n. Tier 4	0	0
o. Tier 5	0	0
p. Tier 6	0	0

q. Approximate quantity of meters/accounts on this rate schedule	3605
r. Are elevation charges included?	no
s. Approximate total annual water usage (AF) from customers on this rate schedule	978

### **BMP 11: Conservation Pricing**

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2005**

#### **3.A. Commercial Rate Schedule A**

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from only Volumetric Charges	174733
d. Total Revenue from Non-Volumetric Charges (Includes fixed fees, surcharges, minimum usage charges, monthly service charges, meter charges etc.)	693531
e. Total Revenue from this category	868264

#### **3.A. Rate Schedule - Volumetric**

**Title:** Commercial

f. Billing Cycles/year	12
g. Service Charges/Cycle	74.72
h. Gallons/Bill Unit	0
i. Minimum Use/Cycle	0
j. Non-billed Units (included in monthly service charge)	0

<b>\$/Bill Unit</b>	<b>Starting At (unit qty.)</b>
---------------------	------------------------------------

k. Tier 1	1.42	0
l. Tier 2	0	0
m. Tier 3	0	0
n. Tier 4	0	0
o. Tier 5	0	0
p. Tier 6	0	0
q. Approximate quantity of meters/accounts on this rate schedule		817
r. Are elevation charges included?		no
s. Approximate total annual water usage (AF) from customers on this rate schedule		978

## BMP 12: Conservation Coordinator

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2005**

### A. Implementation

1. Does your Agency have a conservation coordinator? no
2. Is a coordinator position supplied by another agency with which you cooperate in a regional conservation program ? no
  - a. Partner agency's name:
3. If your agency supplies the conservation coordinator:
  - a. What percent is this conservation coordinator's position? 0%
  - b. Coordinator's Name
  - c. Coordinator's Title
  - d. Coordinator's Experience and Number of Years
  - e. Date Coordinator's position was created (mm/dd/yyyy)
4. Number of conservation staff (FTEs), including Conservation Coordinator. 0

### B. Conservation Staff Program Expenditures

1. Staffing Expenditures (In-house Only) 0
2. BMP Program Implementation Expenditures 0

### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict waterconservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-

out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

#### D. Comments

For many years the City has compared the amount of water supplied versus the amount of water sold. The difference, representing the unaccounted for water is approximately less than 10%. The unaccounted water is attributed to water line flushing, fires and fire drills and leakage. This is considered to be within acceptable limits and leakage audits and similar measures are not considered to be cost effective to the rate payers. We have a very aggressive meter replacement program that includes upgrading to Metron meters which are very accurate in low flow situations. They are scheduled for replacement every 12 to 15 years.

### BMP 13: Water Waste Prohibition

Reporting Unit:

BMP Form Status:

Year:

**City of Pismo Beach**

**100% Complete**

**2005**

#### A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area? yes

a. If YES, describe the ordinance:

The City has a lengthy detailed sewer use ordinance (O-93-15). Prohibitions of discharging in storm drains, discharges that adversely humans or environment, and discharges of stored liquid wastes are in effect

2. Is a copy of the most current ordinance(s) on file with CUWCC? no

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

City of Pismo Beach

O-93-15

#### B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

a. Gutter flooding yes

b. Single-pass cooling systems for new connections no

c. Non-recirculating systems in all new conveyor or car wash systems yes

d. Non-recirculating systems in all new commercial laundry systems yes

e. Non-recirculating systems in all new decorative fountains no

f. Other, please name yes  
restaurants: grease, oils, fats

2. Describe measures that prohibit water uses listed above:

Prohibitions of discharging in storm drains, discharges that adversely humans or environment, and discharges of stored liquid wastes are in effect

#### Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

a. Allow the sale of more efficient, demand-initiated

- regenerating DIR models. yes
- b. Develop minimum appliance efficiency standards that:
- i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used. no
  - ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced. no
- c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply. no
4. Does your agency include water softener checks in home water audit programs? no
5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models? no
- C. "At Least As Effective As"**
1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

City ordinance O-93-15. NPDES permit requirements are followed.

#### **D. Comments**

### **BMP 14: Residential ULFT Replacement Programs**

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status: Year:  
**100% Complete 2005**

#### **A. Implementation**

**Number of 1.6 gpf Toilets Replaced by Agency Program During Report Year**

	<b>Single-Family Accounts</b>	<b>Multi-Family Units</b>
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
<b>Replacement Method</b>	<b>SF Accounts</b>	<b>MF Units</b>
2. Rebate	0	0
3. Direct Install	0	0
4. CBO Distribution	0	0
5. Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**Number of 1.2 gpf High-Efficiency Toilets (HETs) Replaced by Agency Program During Report Year**

**Single-Family Multi-**

	Accounts	Family Units
6. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
<b>Replacement Method</b>	<b>SF Accounts</b>	<b>MF Units</b>
7. Rebate	0	0
8. Direct Install	0	0
9. CBO Distribution	0	0
10. Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**Number of Dual-Flush Toilets Replaced by Agency Program During Report Year**

	Single-Family Accounts	Multi-Family Units
11. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
<b>Replacement Method</b>	<b>SF Accounts</b>	<b>MF Units</b>
12. Rebate	0	0
13. Direct Install	0	0
14. CBO Distribution	0	0
15. Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

16. Describe your agency's ULFT, HET, and/or Dual-Flush Toilet programs for single-family residences.

17. Describe your agency's ULFT, HET, and/or Dual-Flush Toilet programs for multi-family residences.

18. Is a toilet retrofit on resale ordinance in effect for your service area? no

19. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

**B. Residential ULFT Program Expenditures**

1. Estimated cost per ULFT/HET replacement: 0

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict waterconservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-

out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

**D. Comments**

**Water Supply & Reuse**

Reporting Unit:

**City of Pismo Beach**

Year:

**2006****Water Supply Source Information**

<b>Supply Source Name</b>	<b>Quantity (AF) Supplied</b>	<b>Supply Type</b>
Lake Lopez Water	896	Local Watershed
State Water	546.79	Imported
Well Water	678.43	Groundwater

**Total AF: 2121.22**

Reported as of 6/30/10

## Accounts & Water Use

Reporting Unit Name:  
**City of Pismo Beach**

Submitted to  
CUWCC  
03/07/2008

Year:  
**2006**

What is the reporting year?	Fiscal	Month Ending	June
<b>A. Service Area Population Information:</b>			
1. Total service area population	8662		
<b>B. Number of Accounts and Water Deliveries (AF)</b>			
Type	Metered	Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts
			Water Deliveries (AF)
1. Single-Family	3610	963	0
2. Multi-Family	0	0	0
3. Commercial	715	877	0
4. Industrial	59	9	0
5. Institutional	66	82	0
6. Dedicated Irrigation	0	0	0
7. Recycled Water	0	0	0
8. Other	0	0	0
9. Unaccounted	NA	0	NA
<b>Total</b>	4450	1931	0

**Metered**

**Unmetered**

Reported as of 6/30/10

## BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2006**

### A. Implementation

- Based on your signed MOU date, 12/08/2004, your Agency STRATEGY DUE DATE is: 12/08/2006
- Has your agency developed and implemented a targeting/marketing strategy for SINGLE-FAMILY residential water use surveys? no
  - If YES, when was it implemented?
- Has your agency developed and implemented a targeting/marketing strategy for MULTI-FAMILY residential water use surveys? no
  - If YES, when was it implemented?

### B. Water Survey Data

**Survey Counts:**

**Single Family Multi-Family**

	Accounts	Units
1. Number of surveys offered:	0	0
2. Number of surveys completed:	0	0
<b>Indoor Survey:</b>		
3. Check for leaks, including toilets, faucets and meter checks	no	no
4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary	no	no
5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary	no	no
<b>Outdoor Survey:</b>		
6. Check irrigation system and timers	no	no
7. Review or develop customer irrigation schedule	no	no
8. Measure landscaped area (Recommended but not required for surveys)	no	no
9. Measure total irrigable area (Recommended but not required for surveys)	no	no
10. Which measurement method is typically used (Recommended but not required for surveys)		None
11. Were customers provided with information packets that included evaluation results and water savings recommendations?	no	no
12. Have the number of surveys offered and completed, survey results, and survey costs been tracked?	no	no
a. If yes, in what form are surveys tracked?		None
b. Describe how your agency tracks this information.		

### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with water conservation fixtures in order to obtain a building permit. Strict water conservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

### D. Comments

City Council resolutions and ordinances can be furnished upon request.

Reported as of 6/30/10

**BMP 02: Residential Plumbing Retrofit**

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2006**

**A. Implementation**

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? no

a. If YES, list local jurisdictions in your service area and code or ordinance in each:

City of Pismo Beach Ordinance O-90-10, "Instituting Mandatory Water Conservation Measures"

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? yes

3. Estimated percent of single-family households with low-flow showerheads: 90%

4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? yes

5. Estimated percent of multi-family households with low-flow showerheads: 90%

6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

Same information as provided in the 2005 Report. Please see the column to the right hereon.

**B. Low-Flow Device Distribution Information**

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? no

a. If YES, when did your agency begin implementing this strategy?

b. Describe your targeting/ marketing strategy.

Same as the 2005 Report.

<b>Low-Flow Devices Distributed/ Installed</b>	<b>SF Accounts</b>	<b>MF Units</b>
2. Number of low-flow showerheads distributed:	0	0
3. Number of toilet-displacement devices distributed:	0	0
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed:	0	0
6. Does your agency track the distribution and cost of low-flow devices?		no

a. If YES, in what format are low-flow devices tracked?

b. If yes, describe your tracking and distribution system :

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

In the late 80's and early 90's the City required retrofitting existing fixtures as a requirement to obtain a building permit. The City was

extensively surveyed and retrofitted at that time. Building codes have also required water saving devices. Hence, it is believed that the City is up to current water saving standards. This information is contained in the 2005 Report.

#### D. Comments

According to the City's Water Master Plan there is sufficient potable water to meet the full build out needs of the City.

Reported as of 6/30/10

### BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2006**

#### A. Implementation

1. Does your agency own or operate a water distribution system? yes
2. Has your agency completed a pre-screening system audit for this reporting year? no
3. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:
  - a. Determine metered sales (AF)
  - b. Determine other system verifiable uses (AF)
  - c. Determine total supply into the system (AF)
  - d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. 0.00
4. Does your agency keep necessary data on file to verify the values entered in question 3? yes
5. Did your agency complete a full-scale audit during this report year? no
6. Does your agency maintain in-house records of audit results or completed AWWA M36 audit worksheets for the completed audit which could be forwarded to CUWCC? no
7. Does your agency operate a system leak detection program? yes
  - a. If yes, describe the leak detection program:

When a leak is suspected, we contract with a specialist to determine the probable location of the leak. Then we excavate and repair.

#### B. Survey Data

1. Total number of miles of distribution system line. 52.5
2. Number of miles of distribution system line surveyed. 5.25

#### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

The City has records of water supplied and water sold and compares the difference. This figure is typically less than 8%, which is within acceptable limits.

#### D. Comments

## Voluntary Questions (Not used to calculate compliance)

### E. Volumes

	Estimated	Verified
1. Volume of raw water supplied to the system:	0	0
2. Volume treated water supplied into the system:	2141.51	2141.51
3. Volume of water exported from the system:	0	0
4. Volume of billed authorized metered consumption:	1970.19	1970.19
5. Volume of billed authorized unmetered consumption:	0	0
6. Volume of unbilled authorized metered consumption:	0	0
7. Volume of unbilled authorized unmetered consumption:	0	0

### F. Infrastructure and Hydraulics

1. System input (source or master meter) volumes metered at the entry to the:		Distribution System
2. How frequently are they tested and calibrated?		6
3. Length of mains:	52.5	52.5
4. What % of distribution mains are rigid pipes (metal, ac, concrete)?	50	
5. Number of service connections:	4600	4600
6. What % of service connections are rigid pipes (metal)?	10	10
7. Are residential properties fully metered?		yes
8. Are non-residential properties fully metered?		yes
9. Provide an estimate of customer meter under-registration:	10	10
10. Average length of customer service line from the main to the point of the meter:	30	30
11. Average system pressure:		60
12. Range of system pressures:		From 35 to 70
13. What percentage of the system is fed from gravity feed?		60
14. What percentage of the system is fed by pumping and re-pumping?		40

### G. Maintenance Questions

1. Who is responsible for providing, testing, repairing and replacing customer meters?		Utility
2. Does your agency test, repair and replace your meters on a regular timed schedule?		yes
a. If yes, does your agency test by meter size or customer category?:		Meter Size
b. If yes to meter size, please provide the frequency of testing by meter size:		5 years

Less than or equal to 1"	
1.5" to 2"	5 years
3" and Larger	5 months
c. If yes to customer category, provide the frequency of testing by customer category:	
SF residential	
MF residential	
Commercial	
Industrial & Institutional	
3. Who is responsible for repairs to the customer lateral or customer service line?	Utility
4. Who is responsible for service line repairs downstream of the customer meter?	Customer
5. Does your agency proactively search for leaks using leak survey techniques or does your utility reactively repair leaks which are called in, or both?	Leak Repairs
6. What is the utility budget breakdown for:	
Leak Detection	\$ 10,000
Leak Repair	\$ 10,000
Auditing and Water Loss Evaluation	\$ 1,000
Meter Testing	\$ 2,000

#### H. Comments

The City has a very aggressive program of replacing meters. This reduces leakage and improves revenues. It is very cost effective and conservation wise.

Reported as of 6/30/10

### BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status: **100% Complete**      Year: **2006**

#### A. Implementation

1. Please fill out the following matrix:

Types of Billed Accounts	% Accounts Metered	% Accounts Measured (Not Metered)	% Accounts Volumetric Billing
Treated Water SF Residential Accounts	100		100
Treated Water MF Residential Accounts	100		100
Treated Water Commercial Accounts	100		100
Treated Water Industrial Accounts	100		100
Treated Water Institutional	100		0

Accounts			
Raw Water	0	0	0
Residential Deliveries			
Raw Water Non-Residential Deliveries	0	0	0
2. If your agency does not meter 100% of all treated water accounts:			
a. Does your agency have a plan or program for retrofitting existing unmetered treated water connections?			No
b. By what date would 100% of all treated water accounts be metered?			2008
c. Number of previously unmetered accounts fitted with meters during report year:			0
3. If your agency does not bill 100% of all treated water accounts by volume of use:			
a. By what date (Year must be four digit mm/dd/yyyy) will all customers with meters be billed by volume of use?			2008
4. If your agency does not meter or measure 100% of all raw water delivery fields (as listed in quesiton 1f & 1g), does your agency intend to develop a program for measuring all raw water deliveries?			No
5. If your agency does not volumetrically bill 100% of all raw water delivery, does your agency intend to develop a program for billing all raw water deliveries by volume of use?			No
6. Does your agency meter by volume of use all municipal or governmental accounts?:			Yes
a. If no, which types of accounts are not included:			
7. Does your agency bill by volume of use all municipal or governmental accounts?			No
a. If no, which types of accounts are not included:			

#### Street Sweeping

### B. Feasibility Study

1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	no
a. If YES, when was the feasibility study conducted? (mm/dd/yy)	
b. Describe the feasibility study:	
2. Number of CII accounts with mixed-use meters:	338
3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period	0

### D. "At Least As Effective As"

1. Is your agency implementing an "at least as effective as" variant of this BMP?	No
a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."	

### E. Comments

We began billing for institutional/government metered accounts in

December 2007.

## BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2006**

### A. Water Use Budgets

- |  |     |
|--|-----|
| 1. Number of Dedicated Irrigation Meter Accounts:  | 733 |
| 2. Number of Dedicated Irrigation Meter Accounts with Water Budgets:                       | 0   |
| 3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF):                     | 0   |
| 4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF):                       | 2   |
| 5. Does your agency provide water use notices to accounts with budgets each billing cycle? | no  |

### B. Landscape Surveys

- |  |    |
|--|----|
| 1. Has your agency developed a marketing / targeting strategy for landscape surveys? | no |
| a. If YES, when did your agency begin implementing this strategy?                    |    |
| b. Description of marketing / targeting strategy:                                    |    |
| 2. Number of Surveys Offered.  | 0  |
| 3. Number of Surveys Completed.  | 0  |
| 4. Indicate which of the following Landscape Elements are part of your survey:       |    |
| a. Irrigation System Check   | no |
| b. Distribution Uniformity Analysis  | no |
| c. Review / Develop Irrigation Schedules   | no |
| d. Measure Landscape Area  | no |
| e. Measure Total Irrigable Area  | no |
| f. Provide Customer Report / Information   | no |
| 5. Do you track survey offers and results?   | no |
| 6. Does your agency provide follow-up surveys for previously completed surveys?      | no |
| a. If YES, describe below:   |    |

### C. Other BMP 5 Actions

- |   |    |
|---|----|
| 1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? | no |
| 2. Number of CII mixed-use accounts with landscape budgets.   | 0  |
| 3. Do you offer landscape irrigation training?  | no |
| 4. Does your agency offer financial incentives to improve landscape water use efficiency?   | no |

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	0	0
b. Loans	0	0	0
c. Grants	0	0	0
5. Do you provide landscape water use efficiency information to new customers and customers changing services?			No
a. If YES, describe below:			
6. Do you have irrigated landscaping at your facilities?			yes
a. If yes, is it water-efficient?			yes
b. If yes, does it have dedicated irrigation metering?			yes
7. Do you provide customer notices at the start of the irrigation season?			no
8. Do you provide customer notices at the end of the irrigation season?			no
<b>D. "At Least As Effective As"</b>			
1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?			yes
a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."			
Reminders in monthly newsletters and bill stuffers. In addition banner installed reminding residents that every drop counts.			

**E. Comments**

See comments in section D.

Reported as of 6/30/10

**BMP 06: High-Efficiency Washing Machine Rebate Programs**

Reporting Unit: **City of Pismo Beach**      BMP Form Status: **100% Complete**      Year: **2006**

**A. Coverage Goal**

	Single Family	Multi-Family
1. Number of <b>residential</b> dwelling units in the agency service area.	3,593	284
2. Coverage Goal = Total Dwelling Units x 0.048	= 223 Points	

**B. Implementation**

1. Does your agency offer rebates for **residential** high-efficiency washers?      no

Total Value of Financial Incentives					
HEW Water Factor	Number of Financial Incentives Issued	Retail Water Agency	Wholesaler/ Grants (if applicable)	Energy Utility (if applicable)	TOTAL
					POINTS AWARDED

2. <b>Greater than 8.5 but not exceeding 9.5</b> (1 point)	\$ 0	\$ 0	\$ 0	\$ 0
3. <b>Greater than 6.0 but not exceeding 8.5</b> (2 points)	\$ 0	\$ 0	\$ 0	\$ 0
4. <b>Less than or equal to 6.0</b> (3 points)	\$ 0	\$ 0	\$ 0	\$ 0

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<b>TOTALS:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
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### C. Past Credit Points

**For HEW incentives issued before July 1, 2004, select ONE of the following TWO options:**

- Method One: Points based on HEW Water Factor
- Method Two: Agency earns 1 point for each HEW.

NOTE: Agency shall not receive credit for any HEW incentives where the agency did not provide a financial incentive of \$25 or more.

#### Method One: Points based on HEW Water Factor

HEW Water Factor	Number of Financial Incentives Issued	Total Value of Water Agency Financial Incentives	POINTS AWARDED
1. <b>Greater than 8.5 but not exceeding 9.5</b> (1 point each)	0	\$ 0	0
2. <b>Greater than 6.0 but not exceeding 8.5</b> (2 points each)	0	\$ 0	0
3. <b>Less than or equal to 6.0</b> (3 points each)	0	\$ 0	0

#### Method Two: Agency earns 1 point for each HEW

	Number of Financial Incentives Issued	Total Value of Water Agency Financial Incentives	POINTS AWARDED
4. <b>Total HEWs installed</b>			
<b>PAST CREDIT TOTALS:</b>	<b>0</b>	<b>\$ 0</b>	<b>0</b>

### D. Rebate Program Expenditures

- |   |      |
|---|------|
| 1. Average or Estimated Administration and Overhead   | \$ 0 |
| 2. Is the financial incentive offered per HEW at least equal to the marginal benefits of the water savings per HEW? |      |

### E. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?                      no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**F. Comments**

**BMP 07: Public Information Programs**

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2006****A. Implementation**

1. How is your public information program implemented?

No public information program being implemented

2. Describe the program and how it's organized:

none

3. Indicate which and how many of the following activities are included in your public information program:

<b>Public Information Program Activity in Retail Service Area</b>	<b>Yes/No</b>	<b>Number of Events</b>
a. Paid Advertising	no	
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	no	
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	no	
f. Special Events, Media Events	no	
g. Speaker's Bureau	no	
h. Program to coordinate with other government agencies, industry and public interest groups and media	no	

**B. Conservation Information Program Expenditures**

1. Annual Expenditures (Excluding Staffing)

0

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**D. Comments**

Reported as of 6/30/10

**BMP 08: School Education Programs**

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2006****A. Implementation**

1. How is your public information program implemented?

No public information program being implemented

2. Please provide information on your region-wide school programs (by grade level):

<b>Grade</b>	<b>Are grade-appropriate materials distributed?</b>	<b>No. of class presentations</b>	<b>No. of students reached</b>	<b>No. of teachers' workshops</b>
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Grades K-3rd

Grades 4th-6th

Grades 7th-8th

High School

4. Did your Agency's materials meet state education framework requirements? no

5. When did your Agency begin implementing this program?

### **B. School Education Program Expenditures**

1. Annual Expenditures (Excluding Staffing) 0

### **C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

### **D. Comments**

Reported as of 6/30/10

## **BMP 09: Conservation Programs for CII Accounts**

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2006**

### **A. Implementation**

1. Has your agency identified and ranked COMMERCIAL customers according to use? yes

2. Has your agency identified and ranked INDUSTRIAL customers according to use? no

3. Has your agency identified and ranked INSTITUTIONAL customers according to use? yes

---

### **Option A: CII Water Use Survey and Customer Incentives Program**

4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? If so, please describe activity during reporting period: no

<b>CII Surveys</b>	<b>Commercial Accounts</b>	<b>Industrial Accounts</b>	<b>Institutional Accounts</b>
a. Number of New Surveys Offered	0	0	0
b. Number of New Surveys Completed	0	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0

d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0
<b>CII Survey Components</b>	<b>Commercial Accounts</b>	<b>Industrial Accounts</b>	<b>Institutional Accounts</b>
e. Site Visit	no	no	no
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no
<b>Agency CII Customer Incentives</b>	<b>Budget (\$/Year)</b>	<b># Awarded to Customers</b>	<b>Total \$ Amount Awarded</b>
h. Rebates	0	0	0
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

### Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option? no

6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings? no

7. **System Calculated** annual savings (AF/yr):

<b>CII Programs</b>	<b># Device Installations</b>
a. Ultra Low Flush Toilets	
b. Dual Flush Toilets	
c. High Efficiency Toilets	
d. High Efficiency Urinals	
e. Non-Water Urinals	
f. Commercial Clothes Washers (coin-op only; not industrial)	
g. Cooling Tower Controllers	
h. Food Steamers	
i. Ice Machines	
j. Pre-Rinse Spray Valves	
k. Steam Sterilizer Retrofits	
l. X-ray Film Processors	

8. **Estimated** annual savings (AF/yr) from agency programs not including the devices listed in Option B. 7., above:

<b>CII Programs</b>	<b>Annual Savings (AF/yr)</b>
a. Site-verified actions taken by agency:	

b. Non-site-verified actions taken by agency:

## B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

## C. "At Least As Effective As"

1. Is your agency implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

## D. Comments

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict water conservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

## BMP 11: Conservation Pricing

Reporting Unit:	BMP Form	
City of Pismo Beach	Status:	Year:
	100%	2006
	Complete	

## A. Implementation

### Water Service Rate Structure Data by Customer Class

Number of schedules: Use of classification:

For the following accounts, how many rate schedules does agency offer/use? This agency:

1. <b>Single-family residential</b>	1	Uses classification in its billing system
2. <b>Multi-family residential</b>	0	Includes customers in another class
3. <b>Commercial</b>	1	Uses classification in its billing system
4. <b>Industrial</b>	0	Includes customers in another class
5. <b>Institutional/government</b>	0	Includes customers in another class
6. <b>Dedicated irrigation</b> (potable water)	0	Includes customers in another class
7. <b>Other</b>	0	Includes customers in another class
8. <b>Recycled-reclaimed water</b>	0	Does not offer this type of water
9. <b>Raw water</b> (urban use)	0	Does not offer this type of water
10. <b>Wholesale</b> (urban use)	0	Does not offer this type of water

**Sewer Service**

11. Does your agency provide sewer service to your water customers? yes
12. If yes, does sewer service use conservation rate structures? no
13. Has your agency made the required efforts (as prescribed in BMP 11) to have sewer services billed on conservation rates? yes
14. What water agency activities have been undertaken during the reporting period to achieve waste water agency volumetric billing in your water agency service area? None

**B. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**C. Comments****BMP 11: Conservation Pricing**

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2006****1.A. Single-Family Residential Rate Schedule A**

- a. Water Rate Structure Increasing Block
- b. Sewer Rate Structure Non-volumetric Flat Rate
- c. Total Revenue from only Volumetric Charges 602008
- d. Total Revenue from Non-Volumetric Charges  
(Includes fixed fees, surcharges, minimum usage charges, monthly service charges, meter charges etc.) 609897
- e. Total Revenue from this category 1211905

**1.A. Rate Schedule - Volumetric****Title:** Single Family Residence

- f. Billing Cycles/year 12
- g. Service Charges/Cycle 22.7
- h. Gallons/Bill Unit 0
- i. Minimum Use/Cycle 0
- j. Non-billed Units (included in monthly service charge) 0

- |           | <b>\$/Bill Unit</b> | <b>Starting At<br/>(unit qty.)</b> |
|-----------|---------------------|------------------------------------|
| k. Tier 1 | 1.34                | 0                                  |
| l. Tier 2 | 1.7                 | 16                                 |

m. Tier 3	0	0
n. Tier 4	0	0
o. Tier 5	0	0
p. Tier 6	0	0
q. Approximate quantity of meters/accounts on this rate schedule		3610
r. Are elevation charges included?		no
s. Approximate total annual water usage (AF) from customers on this rate schedule		963

### BMP 11: Conservation Pricing

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2006**

#### 3.A. Commercial Rate Schedule A

a. Water Rate Structure	Uniform
b. Sewer Rate Structure	Uniform
c. Total Revenue from only Volumetric Charges	186248
d. Total Revenue from Non-Volumetric Charges (Includes fixed fees, surcharges, minimum usage charges, monthly service charges, meter charges etc.)	621653
e. Total Revenue from this category	807901

#### 3.A. Rate Schedule - Volumetric

**Title:** Commercial

f. Billing Cycles/year	12
g. Service Charges/Cycle	78.75
h. Gallons/Bill Unit	0
i. Minimum Use/Cycle	0
j. Non-billed Units (included in monthly service charge)	0

	<b>\$/Bill Unit</b>	<b>Starting At (unit qty.)</b>
k. Tier 1	1.5	0
l. Tier 2		
m. Tier 3		
n. Tier 4		
o. Tier 5		
p. Tier 6		

q. Approximate quantity of meters/accounts on this rate schedule	840
--	-----

r. Are elevation charges included?	no
s. Approximate total annual water usage (AF) from customers on this rate schedule	968

**BMP 12: Conservation Coordinator**

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2006**

**A. Implementation**

1. Does your Agency have a conservation coordinator? no
2. Is a coordinator position supplied by another agency with which you cooperate in a regional conservation program ? no
  - a. Partner agency's name:
3. If your agency supplies the conservation coordinator:
  - a. What percent is this conservation coordinator's position? 0%
  - b. Coordinator's Name
  - c. Coordinator's Title
  - d. Coordinator's Experience and Number of Years
  - e. Date Coordinator's position was created (mm/dd/yyyy)
4. Number of conservation staff (FTEs), including Conservation Coordinator. 0

**B. Conservation Staff Program Expenditures**

1. Staffing Expenditures (In-house Only) 0
2. BMP Program Implementation Expenditures 0

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict waterconservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

**D. Comments**

For many years the City has compared the amount of water supplied versus the amount of water sold. The difference, representing the unaccounted for water is approximately less than 10%. The unaccounted water is attributed to water line flushing, fires and fire drills and leakage. This is considered to be within acceptable limits and leakage audits and similar measures are not considered to be cost effective to the rate payers. We have a very aggressive meter replacement program that includes upgrading to Metron meters which are very accurate in low flow situations. They are scheduled for replacement every 12 to 15 years.

**BMP 13: Water Waste Prohibition**

Reporting Unit:

BMP Form Status:

Year:

**City of Pismo Beach** **100% Complete** **2006**

**A. Requirements for Documenting BMP Implementation**

1. Is a water waste prohibition ordinance in effect in your service area? yes

a. If YES, describe the ordinance:

The City has a lengthy detailed sewer use ordinance (O-93-15). Prohibitions of discharging in storm drains, discharges that adversely humans or environment, and discharges of stored liquid wastes are in effect

2. Is a copy of the most current ordinance(s) on file with CUWCC? no

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

City of Pismo Beach

O-93-15

**B. Implementation**

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

a. Gutter flooding yes

b. Single-pass cooling systems for new connections no

c. Non-recirculating systems in all new conveyor or car wash systems yes

d. Non-recirculating systems in all new commercial laundry systems yes

e. Non-recirculating systems in all new decorative fountains no

f. Other, please name  
restaurants: grease, oils, fats yes

2. Describe measures that prohibit water uses listed above:

Prohibitions of discharging in storm drains, discharges that adversely humans or environment, and discharges of stored liquid wastes are in effect

**Water Softeners:**

3. Indicate which of the following measures your agency has supported in developing state law:

a. Allow the sale of more efficient, demand-initiated regenerating DIR models. yes

b. Develop minimum appliance efficiency standards that:

i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used. no

ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced. no

c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply. no

4. Does your agency include water softener checks in home water audit programs? no

5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models? no

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

City ordinance O-93-15. NPDES permit requirements are followed.

**D. Comments****BMP 14: Residential ULFT Replacement Programs**

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2006**

**A. Implementation**

**Number of 1.6 gpf Toilets Replaced by Agency Program During Report Year**

	<b>Single-Family Accounts</b>	<b>Multi-Family Units</b>
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
<b>Replacement Method</b>	<b>SF Accounts</b>	<b>MF Units</b>
2. Rebate	0	0
3. Direct Install	0	0
4. CBO Distribution	0	0
5. Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**Number of 1.2 gpf High-Efficiency Toilets (HETs) Replaced by Agency Program During Report Year**

	<b>Single-Family Accounts</b>	<b>Multi-Family Units</b>
6. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
<b>Replacement Method</b>	<b>SF Accounts</b>	<b>MF Units</b>
7. Rebate	0	0
8. Direct Install	0	0
9. CBO Distribution	0	0
10. Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**Number of Dual-Flush Toilets Replaced by Agency Program During Report Year**

**Single-Family      Multi-**

	Accounts	Family Units
11. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
Replacement Method	SF Accounts	MF Units
12. Rebate	0	0
13. Direct Install	0	0
14. CBO Distribution	0	0
15. Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>
16. Describe your agency's ULFT, HET, and/or Dual-Flush Toilet programs for single-family residences.		
17. Describe your agency's ULFT, HET, and/or Dual-Flush Toilet programs for multi-family residences.		
18. Is a toilet retrofit on resale ordinance in effect for your service area?		no
19. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:		

## B. Residential ULFT Program Expenditures

1. Estimated cost per ULFT/HET replacement: 0

## C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict waterconservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

## D. Comments

# BMP 1 Coverage Requirement Status

Reporting Unit ID 6979 Rep Unit Name: City of Pismo Beach

Date MOU Signed: 12/8/2004 Reporting Period: 07-08 Rep Unit Category: Retail Only

RU indicated "At least as effective as" implementation during report period: Yes

RU filed an exemption for this BMP during report period: No exemption request filed

If exemption filed, type: \_\_\_\_\_

## Exhibit 1 Coverage Requirement

An agency must meet three conditions to satisfy strict compliance for BMP 1.

Condition 1: Adopt survey targeting and marketing strategy on time

Condition 2: Offer surveys to 20% of SF accounts and 20% of MF units during report period

Condition 3: Be on track to survey 15% of SF accounts and 15% of MF units within 10 years of implementation start date.

### Test For Condition 1

Latest Year RU to Implement Targeting/Marketing Program: 2006

	Single Family	Multi Family
Year RU Reported Implementing Targeting/Marketing Program:	_____	_____
RU Met Targeting/Marketing Coverage Requirement:	_____	_____

### Test For Condition 2

	Single Family	Multi Family
Latest Year Survey Program to Start: <u>2005</u>	<u>0.00%</u>	<u>0.00%</u>
Select a Reporting Period: <u>07-08</u>	<u>No</u>	<u>No</u>

### Test For Condition 3

	Completed Residential Surveys	
	Single Family	Multi Family
Total Completed Surveys through 2008	<u>0</u>	<u>0</u>
Credit for Surveys Completed Prior to Implementation of Reporting Database	_____	_____
Total + Credit	<u>0</u>	<u>0</u>
Res. Accounts in Base Year	<u>3,521</u>	<u>287</u>
RU Survey Coverage as % of Base Year Res Accounts	<u>0.00%</u>	<u>0.00%</u>
Coverage Requirement by Year 3 of Implementation per Exhibit 1	<u>2.50%</u>	<u>2.50%</u>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>No</u>	<u>No</u>

## BMP 1 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

# BMP 2 Coverage Requirement Status

Reporting Unit ID	<input type="text" value="6979"/>	Rep Unit Name:	<u>City of Pismo Beach</u>
Date MOU Signed:	<u>12/8/2004</u>	Reporting Period:	<u>07-08</u>
		Rep Unit Category:	<u>Retail Only</u>
RU indicated "At least as effective as" implementation during report period:		<u>Yes</u>	
RU filed an exemption for this BMP during report period:		<u>No exemption request filed</u>	
If exemption filed, type:		<u></u>	

## Exhibit 1 Coverage Requirement

An agency must meet **one** of three conditions to satisfy strict compliance for BMP 2.

Condition 1: The agency has demonstrated that 75% of SF accounts and 75% of MF units constructed prior to 1992 are fitted with low-flow showerheads.

Condition 2: An enforceable ordinance requiring the replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts is in place for the agency's service area.

Condition 3: The agency has distributed or directly installed low-flow showerheads and other low-flow plumbing devices to not less than 10% of single-family accounts and 10% of multi-family units constructed prior to 1992 during the reporting period.

## Test For Condition 1

Report Year	Report Period	Single Family		Multi Family	
		Reported Saturation	Saturation 75%?	Reported Saturation	Saturation 75%?
1999	99-00				
2000	99-00				
2001	01-02				
2002	01-02				
2003	03-04				
2004	03-04				
2005	05-06	90	Yes	90	Yes
2006	05-06	90	Yes	90	Yes
2007	07-08	90	No	90	Yes
2008	07-08	90	No	90	No

# BMP 2 Coverage Requirement Status

---

## Test For Condition 2

RU has ordinance  
requiring showerhead  
retrofit?

Report Year	Report Period	
1999	99-00	
2000	99-00	
2001	01-02	
2002	01-02	
2003	03-04	
2004	03-04	
2005	05-06	Yes
2006	05-06	No
2007	07-08	Yes
2008	07-08	No

## Test For Condition 3

1992 SF Accounts	Num. Showerheads Distributed to SF Accounts	Single Family Coverage Ratio	SF Coverage Ratio 10%
<u>0</u>	<u>0</u>	<u>?</u>	<u>Yes</u>
1992 MF Accounts	Num. Showerheads Distributed to MF Accounts	Multi Family Coverage Ratio	MF Coverage Ratio 10%
<u>0</u>	<u>0</u>	<u>?</u>	<u>Yes</u>

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## BMP 2 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

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# BMP 3 Coverage Requirement Status

Reporting Unit ID	<input type="text" value="6979"/>	Rep Unit Name:	<u>City of Pismo Beach</u>
Date MOU Signed:	Reporting Period:	Rep Unit Category:	
<u>12/8/2004</u>	<u>07-08</u>	<u>Retail Only</u>	

RU indicated "At least as effective as" implementation during report period: Yes

RU filed an exemption for this BMP during report period: No exemption request filed

If exemption filed, type: \_\_\_\_\_

## Exhibit 1 Coverage Requirement

An agency must meet one of two conditions to be in compliance with BMP 3:

Condition 1: Perform a prescreening audit. If the result is equal to or greater than 0.9 nothing more needs be done.

Condition 2: Perform a prescreening audit. If the result is less than 0.9, perform a full audit in accordance with AWWA's Manual of Water Supply Practices, Water Audits, and Leak Detection.

RU operates a water distribution system: Yes

## Tests For Conditions 1 and 2

Report Year	Report Period	Pre Screen Completed	Pre Screen Result	Full Audit Indicated	Full Audit Completed
<a href="#">1999</a>	<a href="#">99-00</a>				
<a href="#">2000</a>	<a href="#">99-00</a>				
<a href="#">2001</a>	<a href="#">01-02</a>				
<a href="#">2002</a>	<a href="#">01-02</a>				
<a href="#">2003</a>	<a href="#">03-04</a>				
<a href="#">2004</a>	<a href="#">03-04</a>				
<a href="#">2005</a>	<a href="#">05-06</a>	No	?		No
<a href="#">2006</a>	<a href="#">05-06</a>	No			No
<a href="#">2007</a>	<a href="#">07-08</a>	No	?		No
<a href="#">2008</a>	<a href="#">07-08</a>	No	?		No

## BMP 3 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

# BMP 4 Coverage Requirement Status

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Reporting Unit ID	<input type="text" value="6979"/>	Rep Unit Name:	<u>City of Pismo Beach</u>
Date MOU Signed:	<u>12/8/2004</u>	Reporting Period:	<u>07-08</u>
		Rep Unit Category:	<u>Retail Only</u>
RU indicated "At least as effective as" implementation during report period:		<u>No</u>	
RU filed an exemption for this BMP during report period:		<u>No exemption request filed</u>	
If exemption filed, type:		<u></u>	

## Exhibit 1 Coverage Requirement

For agencies signing the MOU prior to December 31, 1997:

100% of existing unmetered accounts to be metered and billed by volume of use by July 1, 2009.

For agencies signing the MOU after December 31, 1997:

100% of existing unmetered accounts to be metered and billed by volume of use by July 1, 2012  
OR within six years of signing the MOU (whichever date is later). All retrofits must be completed no later than one year prior to the requirements of state law (January 1, 2025).

## Tests For Compliance

Total Meter Retrofits Reported through 2008	<u>0</u>
No. of Unmetered Accounts in Base Year	<u>0</u>
Meter Retrofit Coverage as % of Base Year Unmetered Accounts	<u>No Unmetered Accounts</u>
Coverage Requirement by Year 3 of Implementation	<input type="text" value="50.0%"/>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>Yes</u>

---

## BMP 4 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

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# BMP 5 Coverage Requirement Status

Reporting Unit ID	<input type="text" value="6979"/>	Rep Unit Name: <u>City of Pismo Beach</u>
Date MOU Signed: <u>12/8/2004</u>	Reporting Period: <u>07-08</u>	Rep Unit Category: <u>Retail Only</u>

RU filed an exemption for this BMP during report period: No exemption request filed  
If exemption filed, type: \_\_\_\_\_

RU indicated "At least as effective as" implementation during report period: Yes

## Exhibit 1 Coverage Requirement

An agency must meet three conditions to comply with BMP 5.

Condition 1: Develop water budgets for 90% of its dedicated landscape meter accounts within four years of the date implementation is to start.

Condition 2: (a) Offer landscape surveys to at least 20% of its CII accounts with mixed use meters each report cycle and be on track to survey at least 15% of its CII accounts with mixed use meters within 10 years of the date implementation is to start OR (b) Implement a dedicated landscape meter retrofit program for CII accounts with mixed use meters or assign landscape budgets to mixed use meters.

Condition 3: Implement and maintain customer incentive program(s) for irrigation equipment retrofits.

## Test For Condition 1

Report Year	Report Period	BMP 5 Implementation Year	No. of Irrigation Meter Accounts	No. of Irrigation Accounts with Budgets	Budget Coverage Ratio	90% Coverage Met by Year 4
1999	99-00	-7				NA
2000	99-00	-6				NA
2001	01-02	-5				NA
2002	01-02	-4				NA
2003	03-04	-3				NA
2004	03-04	-2				NA
2005	05-06	-1	720	0	0.00	NA
2006	05-06	0	733	0	0.00	NA
2007	07-08	1	163	0	0.00	NA
2008	07-08	2	132	0	0.00	NA

## Test For Condition 2a (survey offers)

Select Reporting Period: 07-08

Large Landscape Survey Offers as % of Mixed Use Meter CII Accounts: 0.0%

Survey Offers Equal or Exceed 20% Coverage Requirement: No

# BMP 5 Coverage Requirement Status

## Test For Condition 2a (surveys completed)

Total Completed Landscape Surveys Reported through 2008	0
Credit for Surveys Completed Prior to Implementation of Reporting Database	
Total + Credit	0
CII Accounts with Mixed Use Meters in Base Year	0
RU Survey Coverage as % of Base Year CII Accounts	?
Coverage Requirement by Year 2 of Implementation per Exhibit 1	1.5%
RU on Schedule to Meet 10 Year Coverage Requirement	

## Test For Condition 2b (mixed use budget or meter retrofit program)

Report Year	Report Period	BMP 5 Implementation Year	Agency has mix-use budget program	No. of mixed-use budgets
1999	99-00	-7		
2000	99-00	-6		
2001	01-02	-5		
2002	01-02	-4		
2003	03-04	-3		
2004	03-04	-2		
2005	05-06	-1	no	0
2006	05-06	0	no	0
2007	07-08	1	no	0
2008	07-08	2	no	0

Report Year	Report Period	BMP 4 Implementation Year	No. of mixed use CII accounts	No. of mixed use CII accounts fitted with irrig. meters
1999	99-00	-6		
2000	99-00	-5		
2001	01-02	-4		
2002	01-02	-3		
2003	03-04	-2		
2004	03-04	-1		
2005	05-06	0	338	0
2006	05-06	1	338	0
2007	07-08	2	15	15
2008	07-08	3	17	17

# BMP 5 Coverage Requirement Status

## Test For Condition 3

Report Year	Report Period	BMP 5 Implementation Year	RU offers financial incentives?	<u>Loans</u>		<u>Grants</u>		<u>Rebates</u>	
				No.	Total Amount	No.	Total Amount	No.	Total Amount
1999	99-00	-7							
2000	99-00	-6							
2001	01-02	-5							
2002	01-02	-4							
2003	03-04	-3							
2004	03-04	-2							
2005	05-06	-1	no	0	0	0	0	0	0
2006	05-06	0	no	0	0	0	0	0	0
2007	07-08	1	no	0	0	0	0	0	0
2008	07-08	2	no	0	0	0	0	0	0

## BMP 5 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

# BMP 6 Coverage Requirement Status

Reporting Unit ID	<input type="text" value="6979"/>	Rep Unit Name: <u>City of Pismo Beach</u>
Date MOU Signed: <u>12/8/2004</u>	Reporting Period: <u>07-08</u>	Rep Unit Category: <u>Retail Only</u>
RU indicated "At least as effective as" implementation during report period:		<u>No</u>
RU filed an exemption for this BMP during report period:		<u>No exemption request filed</u>
If exemption filed, type:		<u></u>

## Pre-2004 Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 6.

Condition 1: Offer a cost-effective financial incentive for high-efficiency washers if one or more energy service providers in service area offer financial incentives for high-efficiency washers.

## Revised Exhibit 1 Coverage Requirement

An agency must meet two conditions to comply with BMP 6.

Condition 1: Offer cost-effective financial incentives for high-efficiency washers with Water Factors of 9.5 or less.

Condition 2: Meet Coverage Goal ( $CG = \text{Total Dwelling Units} \times 0.0768$ ) by July 1, 2008. Agencies signing the MOU after July 1, 2003, shall have a prorated Coverage Goal, based on implementation period of less than 4.0 years.

### Test For Condition 1

Agency offered cost-effective financial incentives for high-efficiency washers with Water Factors of 9.5 or less: no

### Test For Condition 2

Coverage Goal:	<u>223</u>
Total Coverage Points Awarded (incl. past credit):	<u>0</u>
% of Coverage Goal:	<u>0.0%</u>

## BMP 6 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

# BMP 7 Coverage Requirement Status

Reporting Unit ID

6979

Rep Unit Name:

City of Pismo Beach

Date MOU Signed:

12/8/2004

Reporting Period:

07-08

Rep Unit Category:

Retail Only

RU indicated "At least as effective as" implementation during report period:

No

RU filed an exemption for this BMP during report period:

No exemption request filed

If exemption filed, type:

## Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 7.

Condition 1: Implement and maintain a public information program consistent with BMP 7's definition.

### Test For Condition 1:07-08

Report Year	Report Period	BMP 7 Implementation Year	RU Has Public Information Program
1999	99-00	-6	
2000	99-00	-5	
2001	01-02	-4	
2002	01-02	-3	
2003	03-04	-2	
2004	03-04	-1	
2005	05-06	0	No
2006	05-06	1	No
2007	07-08	2	No
2008	07-08	3	No

## BMP 7 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

# BMP 8 Coverage Requirement Status

Reporting Unit ID

6979

Rep Unit Name:

City of Pismo Beach

Date MOU Signed:

12/8/2004

Reporting Period:

07-08

Rep Unit Category:

Retail Only

RU indicated "At least as effective as" implementation during report period:

No

RU filed an exemption for this BMP during report period:

No exemption request filed

If exemption filed, type:

## Exhibit 1 Coverage Requirement

An agency must meet one condition to comply with BMP 8.

Condition 1: Implement and maintain a school education program consistent with BMP 8’s definition.

### Test For Condition 1

Report Year	Report Period	BMP 8 Implementation Year	RU Has School Education Program
1999	99-00	-6	
2000	99-00	-5	
2001	01-02	-4	
2002	01-02	-3	
2003	03-04	-2	
2004	03-04	-1	
2005	05-06	0	No
2006	05-06	1	No
2007	07-08	2	No
2008	07-08	3	No

## BMP 8 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

# BMP 9 Coverage Requirement Status

Reporting Unit ID	<u>6979</u>	Rep Unit Name:
Date MOU Signed:	Reporting Period:	<u>City of Pismo Beach</u>
<u>12/8/2004</u>	<u>07-08</u>	Rep Unit Category:
		<u>Retail Only</u>

RU indicated "At least as effective as" implementation during report period: No

RU filed an exemption for this BMP during report period: No exemption request filed  
If exemption filed, type: \_\_\_\_\_

## Exhibit 1 Coverage Requirement

An agency must meet two conditions to comply with BMP 9.

Condition 1: Agency has identified and ranked by use commercial, industrial, and institutional accounts.

Condition 2(a): Agency is on track to survey 10% of commercial accounts, 10% of industrial accounts, and 10% of institutional accounts within 10 years of date implementation to commence.

OR

Condition 2(b): Agency is on track to reduce CII water use by an amount equal to 10% of baseline use within 10 years of date implementation to commence.

OR

Condition 2(c): Agency is on track to meet the combined target as described in Exhibit 1 BMP 9 documentation.

## Test For Condition 1

Ranked Commercial Customers **yes**

Ranked Industrial Customers **no**

Ranked Institutional Customers **yes**

Rank Coverage Met **No**

## Test For Condition 2a

	Commercial	Industrial	Institutional
Total Completed Surveys Reported through 2008	<u>0</u>	<u>0</u>	<u>0</u>
Credit for Surveys Completed Prior to Implementation of Reporting Database	<u></u>	<u></u>	<u></u>
Total + Credit	<u>0</u>	<u>0</u>	<u>0</u>
CII Accounts in Base Year	<u>657</u>	<u>63</u>	<u>65</u>
RU Survey Coverage as % of Base Year CII Accounts	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
Coverage Requirement by Year 2 of Implementation per Exhibit 1	<u>1.0%</u>	<u>1.0%</u>	<u>1.0%</u>
RU on Schedule to Meet 10 Year Coverage Requirement	<u>No</u>	<u>No</u>	<u>No</u>

# BMP 9 Coverage Requirement Status

## Test For Condition 2b

Coverage Year	Performance Target Savings (AF/Yr)	Performance Target Savings Coverage	Performance Target Savings Coverage Requirement	Coverage Requirement Met
2006	0	0%	0.5%	No
2007	0	0%	1%	No
2008	0	0%	1.7%	No
2009		0%	2.4%	No
2010		0%	3.3%	No
2011		0%	4.2%	No
2012		0%	5.3%	No
2013		0%	6.4%	No
2014		0%	7.7%	No
2015		0%	9%	No

## Test For Condition 2c

Total BMP 9 Surveys + Credit	0
BMP 9 Survey Coverage	0.0%
BMP 9 Performance Target Coverage	0.0%
BMP 9 Survey + Performance Target Coverage	0.0%
Combined Coverage Equals or Exceeds BMP 9 Survey Coverage Requirement?	No

## BMP 9 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

# BMP 11 Coverage Requirement Status

---

Reporting Unit ID	<div>6979</div>	Rep Unit Name: <u>City of Pismo Beach</u>
Date MOU Signed: <u>12/8/2004</u>	Reporting Period: <u>07-08</u>	Rep Unit Category: <u>Retail Only</u>
RU indicated "At least as effective as" implementation during report period: <u>No</u>		
RU filed an exemption for this BMP during report period: <u>No exemption request filed</u>		
If exemption filed, type: _____		

## Exhibit 1 Coverage Requirement

Agency shall maintain rate structure consistent with BMP 11's definition of conservation pricing.

### Test For Compliance

Fully metered?	Yes
Water Coverage Met?	Yes
Provide Sewer Service?	yes
Sewer Coverage Met?	No

---

## BMP 11 Coverage Status Summary

Water supplier has met the coverage requirements for this BMP.

---

## BMP 11 Sewer Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

---

# BMP 12 Coverage Requirement Status

Reporting Unit ID

6979

Rep Unit Name:

City of Pismo Beach

Date MOU Signed:

12/8/2004

Reporting Period:

07-08

Rep Unit Category:

Retail Only

RU indicated "At least as effective as" implementation during report period:

Yes

RU filed an exemption for this BMP during report period:

No exemption request filed

If exemption filed, type:

## Exhibit 1 Coverage Requirement

Agency shall staff and maintain the position of conservation coordinator and provide support staff as necessary.

## Test For Compliance

Report Year	Report Period	Conservation Coordinator Position Staffed?	Total Staff on Team (incl. CC)
1999	99-00		
2000	99-00		
2001	01-02		
2002	01-02		
2003	03-04		
2004	03-04		
2005	05-06	no	0
2006	05-06	no	0
2007	07-08	no	0
2008	07-08	no	0

## BMP 12 Coverage Status Summary

Water supplier has selected an "At Least As Effective As" option for this BMP.

# BMP 13 Coverage Requirement Status

Reporting Unit ID

6979

Rep Unit Name:

City of Pismo Beach

Date MOU Signed:

12/8/2004

Reporting Period:

07-08

Rep Unit Category:

Retail Only

RU indicated "At least as effective as" implementation during report period:

No

RU filed an exemption for this BMP during report period:

No exemption request filed

If exemption filed, type:

## Exhibit 1 Coverage Requirement

Implementation methods shall be enacting and enforcing measures prohibiting gutter flooding, single pass cooling systems in new connections, non-recirculating systems in all new conveyer car wash and commercial laundry systems, and non-recycling decorative water fountains.

## Test For Compliance

Agency or service area prohibits:							RU has ordinance that meets coverage requirement
Report Year	Gutter Flooding	Single-Pass Cooling Systems	Single-Pass Car Wash	Single-Pass Laundry	Single-Pass Fountains	Other	
1999							
2000							
2001							
2002							
2003							
2004							
2005	yes	no	yes	yes	no	yes	No
2006	yes	no	yes	yes	no	yes	No
2007	yes	no	yes	yes	no	no	No
2008	yes	no	yes	yes	no	no	No

## BMP 13 Coverage Status Summary

Water supplier is not currently on track to meet the coverage requirements for this BMP.

# BMP 14 Coverage Requirement Status

Reporting Unit ID: 6979

Rep Unit Name:

City of Pismo Beach

Base Year: 2004

Rep Unit Category:

Retail Only

## Exhibit 1 Coverage Requirement

An agency must meet one of the following conditions to be in compliance with BMP 14.

Condition 1: Retrofit-on-resale (ROR) in effect in service area

Condition 2: Water savings from toilet replacement programs equal to 90% of Exhibit 6 coverage requirement.

An agency with an exemption for BMP 14 is not required to meet one of the above conditions.

The report treats an agency with missing base year data required to compute the Exhibit 6 coverage requirement as out of compliance with BMP 14.

Coverage Year	BMP 14 Data Submitted to CUWCC	Exemption Filed with CUWCC	ALA EA	ROR Ordinance in Effect	Exhibit 6 Coverage Req'mt (AF)	Toilet Replacement Program Water Savings (AF)
2006	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
2007	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
2008	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
2009	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0
2010	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0
2011	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2012	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2013	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2014	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2015	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	

## BMP 14 Coverage Status Summary: 2010

Water supplier has met the coverage requirements for this BMP.

# BMP 14 Coverage Requirement Status

Reporting Unit ID: 6979

Rep Unit Name:

City of Pismo Beach

Base Year: 2004

Rep Unit Category:

Retail Only

## Exhibit 1 Coverage Requirement

An agency must meet one of the following conditions to be in compliance with BMP 14.

Condition 1: Retrofit-on-resale (ROR) in effect in service area

Condition 2: Water savings from toilet replacement programs equal to 90% of Exhibit 6 coverage requirement.

An agency with an exemption for BMP 14 is not required to meet one of the above conditions.

The report treats an agency with missing base year data required to compute the Exhibit 6 coverage requirement as out of compliance with BMP 14.

Coverage Year	BMP 14 Data Submitted to CUWCC	Exemption Filed with CUWCC	ALA EA	ROR Ordinance in Effect	Exhibit 6 Coverage Req'mt (AF)	Toilet Replacement Program Water Savings (AF)
2006	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
2007	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
2008	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0
2009	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0
2010	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0
2011	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2012	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2013	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2014	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	
2015	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	

## BMP 14 Coverage Status Summary: 2010

Water supplier has met the coverage requirements for this BMP.

**Water Supply & Reuse**

Reporting Unit:

**City of Pismo Beach**

Year:

**2007****Water Supply Source Information****Supply Source Name****Quantity (AF) Supplied****Supply Type**

State Water

Imported

Lopez Water

Local Watershed

Pismo Beach

Groundwater

**Total AF:**

Reported as of 6/9/10

## Accounts & Water Use

Reporting Unit Name:  
**City of Pismo Beach**

Submitted to  
CUWCC  
09/01/2009

Year:  
**2007**

What is the reporting year?	Fiscal	Month Ending	June	
A. Service Area Population Information:				
1. Total service area population	8662			
B. Number of Accounts and Water Deliveries (AF)				
Type	Metered	Unmetered		
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1. Single-Family	4189	265.21	0	0
2. Multi-Family	334	31.76	0	0
3. Commercial	473	145.39	0	0
4. Industrial	0	0	0	0
5. Institutional	83	20.51	0	0
6. Dedicated Irrigation	167	37.8	0	0
7. Recycled Water	0	0	0	0
8. Other	16	.86	0	0
9. Unaccounted	NA	0	NA	0
Total	5262	501.53	0	0
	Metered	Unmetered		

Reported as of 6/9/10

## BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2007**

### A. Implementation

- Based on your signed MOU date, 12/08/2004, your Agency STRATEGY DUE DATE is: 12/08/2006
- Has your agency developed and implemented a targeting/marketing strategy for SINGLE-FAMILY residential water use surveys? no
  - If YES, when was it implemented?
- Has your agency developed and implemented a targeting/marketing strategy for MULTI-FAMILY residential water use surveys? no
  - If YES, when was it implemented?

### B. Water Survey Data

**Survey Counts:**

**Single Family Multi-Family**

	Accounts	Units
1. Number of surveys offered:	0	0
2. Number of surveys completed:	0	0
<b>Indoor Survey:</b>		
3. Check for leaks, including toilets, faucets and meter checks	no	no
4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary	no	no
5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary	no	no
<b>Outdoor Survey:</b>		
6. Check irrigation system and timers	no	no
7. Review or develop customer irrigation schedule	no	no
8. Measure landscaped area (Recommended but not required for surveys)	no	no
9. Measure total irrigable area (Recommended but not required for surveys)	no	no
10. Which measurement method is typically used (Recommended but not required for surveys)		None
11. Were customers provided with information packets that included evaluation results and water savings recommendations?	no	no
12. Have the number of surveys offered and completed, survey results, and survey costs been tracked?	no	no
a. If yes, in what form are surveys tracked?		None
b. Describe how your agency tracks this information.		

### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with water conservation fixtures in order to obtain a building permit. Strict water conservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

### D. Comments

Reported as of 6/9/10

## BMP 02: Residential Plumbing Retrofit

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2007**

### A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? yes

a. If YES, list local jurisdictions in your service area and code or ordinance in each:

City of Pismo Beach Ordinance O-90-10, "Instituting Mandatory Water Conservation Measures"

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? no

3. Estimated percent of single-family households with low-flow showerheads: 90%

4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? yes

5. Estimated percent of multi-family households with low-flow showerheads: 90%

6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

Same information as provided in the 2005 Report.

### B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? no

a. If YES, when did your agency begin implementing this strategy?

b. Describe your targeting/ marketing strategy.

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	0	0
3. Number of toilet-displacement devices distributed:	0	0
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed:	0	0
6. Does your agency track the distribution and cost of low-flow devices?		no

a. If YES, in what format are low-flow devices tracked?

b. If yes, describe your tracking and distribution system :

### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

In the late 80's and early 90's the City required retrofitting existing fixtures as a requirement to obtain a building permit. The City was extensively surveyed and retrofitted at that time. Building codes have also required water saving devices. Hence, it is believed that the City is up to current water saving standards. This information is contained in the

2005 Report.

**D. Comments**

According to the City's Water Master Plan there is sufficient potable water to meet the full build out needs of the City.

Reported as of 6/9/10

**BMP 03: System Water Audits, Leak Detection and Repair**

Reporting Unit:

BMP Form Status:

Year:

**City of Pismo Beach****100% Complete****2007****A. Implementation**

1. Does your agency own or operate a water distribution system? yes
2. Has your agency completed a pre-screening system audit for this reporting year? no
3. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:
  - a. Determine metered sales (AF) 0
  - b. Determine other system verifiable uses (AF) 0
  - c. Determine total supply into the system (AF) 0
  - d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. 0.00
4. Does your agency keep necessary data on file to verify the values entered in question 3? yes
5. Did your agency complete a full-scale audit during this report year? no
6. Does your agency maintain in-house records of audit results or completed AWWA M36 audit worksheets for the completed audit which could be forwarded to CUWCC? no
7. Does your agency operate a system leak detection program? yes
  - a. If yes, describe the leak detection program:

When a leak is suspected, we contract with a specialist to determine the probable location of the leak. Then we excavate and repair.

**B. Survey Data**

1. Total number of miles of distribution system line. 50
2. Number of miles of distribution system line surveyed. 5

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

The City has records of water supplied and water sold and compares the difference. This figure is typically less than 8%, which is within acceptable limits.

**D. Comments****Voluntary Questions (Not used to calculate compliance)****E. Volumes****Estimated      Verified**

1. Volume of raw water supplied to the system:
2. Volume treated water supplied into the system:

3. Volume of water exported from the system:
4. Volume of billed authorized metered consumption:
5. Volume of billed authorized unmetered consumption:
6. Volume of unbilled authorized metered consumption:
7. Volume of unbilled authorized unmetered consumption:

## **F. Infrastructure and Hydraulics**

1. System input (source or master meter) volumes metered at the entry to the:
2. How frequently are they tested and calibrated?
3. Length of mains:
4. What % of distribution mains are rigid pipes (metal, ac, concrete)?
5. Number of service connections:
6. What % of service connections are rigid pipes (metal)?
7. Are residential properties fully metered?
8. Are non-residential properties fully metered?
9. Provide an estimate of customer meter under-registration:
10. Average length of customer service line from the main to the point of the meter:
11. Average system pressure:
12. Range of system pressures:

From to

13. What percentage of the system is fed from gravity feed?
14. What percentage of the system is fed by pumping and re-pumping?

## **G. Maintenance Questions**

1. Who is responsible for providing, testing, repairing and replacing customer meters?
2. Does your agency test, repair and replace your meters on a regular timed schedule?
  - a. If yes, does your agency test by meter size or customer category?:
    - Less than or equal to 1"
    - 1.5" to 2"
    - 3" and Larger
  - b. If yes to meter size, please provide the frequency of testing by meter size:
  - c. If yes to customer category, provide the frequency of testing by customer category:
    - SF residential
    - MF residential
    - Commercial
    - Industrial & Institutional
3. Who is responsible for repairs to the customer lateral or customer service line?

4. Who is responsible for service line repairs downstream of the customer meter?
5. Does your agency proactively search for leaks using leak survey techniques or does your utility reactively repair leaks which are called in, or both?
6. What is the utility budget breakdown for:

Leak Detection	\$
Leak Repair	\$
Auditing and Water Loss Evaluation	\$
Meter Testing	\$

## H. Comments

Reported as of 6/9/10

## BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2007**

### A. Implementation

1. Does your agency have any unmetered service connections? No
  - a. If YES, has your agency completed a meter retrofit plan?
  - b. If YES, number of previously unmetered accounts fitted with meters during report year:
2. Are all new service connections being metered and billed by volume of use? Yes
3. Are all new service connections being billed volumetrically with meters? Yes
4. Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? No
5. Please fill out the following matrix:

Account Type	Number of Metered Accounts	Number of Metered Accounts Read	Number of Metered Accounts Billed by Volume	Billing Frequency Per Year	Number of Volume Estimates
a. Single Family	3656	3656	3656	6	0
b. Multi-Family	334	334	334	6	0
c. Commercial	323	323	323	6	0
d. Industrial	38	38	38	6	0
e. Institutional	66	66	66	6	0
f. Landscape Irrigation	163	163	163	6	0

### B. Feasibility Study

1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? no

a. If YES, when was the feasibility study conducted?  
(mm/dd/yy)

b. Describe the feasibility study:

2. Number of CII accounts with mixed-use meters: 15

3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period. 15

### C. "At Least As Effective As"

1. Is your agency implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

### D. Comments

## BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2007**

### A. Water Use Budgets

1. Number of Dedicated Irrigation Meter Accounts: 163

2. Number of Dedicated Irrigation Meter Accounts with Water Budgets: 0

3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF): 0

4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF): 0

5. Does your agency provide water use notices to accounts with budgets each billing cycle? no

### B. Landscape Surveys

1. Has your agency developed a marketing / targeting strategy for landscape surveys? no

a. If YES, when did your agency begin implementing this strategy?

b. Description of marketing / targeting strategy:

2. Number of Surveys Offered. 0

3. Number of Surveys Completed. 0

4. Indicate which of the following Landscape Elements are part of your survey:

a. Irrigation System Check no

b. Distribution Uniformity Analysis no

c. Review / Develop Irrigation Schedules no

d. Measure Landscape Area no

e. Measure Total Irrigable Area no

f. Provide Customer Report / Information no

5. Do you track survey offers and results? no
6. Does your agency provide follow-up surveys for previously completed surveys? no
- a. If YES, describe below:

### C. Other BMP 5 Actions

1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? no
2. Number of CII mixed-use accounts with landscape budgets. 0
3. Do you offer landscape irrigation training? no
4. Does your agency offer financial incentives to improve landscape water use efficiency? no

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	0	0
b. Loans	0	0	0
c. Grants	0	0	0
5. Do you provide landscape water use efficiency information to new customers and customers changing services?			No

- a. If YES, describe below:
6. Do you have irrigated landscaping at your facilities? yes
- a. If yes, is it water-efficient? yes
- b. If yes, does it have dedicated irrigation metering? yes
7. Do you provide customer notices at the start of the irrigation season? no
8. Do you provide customer notices at the end of the irrigation season? no

### D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

Reminders in monthly newsletters and bill stuffers. In addition banner installed reminding residents that every drop counts.

### E. Comments

Reported as of 6/9/10

## BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:

BMP Form Status:

Year:

**City of Pismo Beach****100% Complete****2007****A. Implementation**

1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers?
  - a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.

2. Does your agency offer rebates for high-efficiency washers? no
3. What is the level of the rebate?
4. Number of rebates awarded.

**B. Rebate Program Expenditures****This Year Next Year**

1. Budgeted Expenditures
2. Actual Expenditures

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**D. Comments**

Reported as of 6/9/10

**BMP 07: Public Information Programs**

Reporting Unit:

BMP Form Status:

Year:

**City of Pismo Beach****100% Complete****2007****A. Implementation**

1. How is your public information program implemented?  
No public information program being implemented
2. Describe the program and how it's organized:
3. Indicate which and how many of the following activities are included in your public information program:

<b>Public Information Program Activity in Retail Service Area</b>	<b>Yes/No</b>	<b>Number of Events</b>
a. Paid Advertising	no	
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	no	
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	no	
f. Special Events, Media Events	no	
g. Speaker's Bureau	no	
h. Program to coordinate with other government	no	

agencies, industry and public interest groups  
and media

**B. Conservation Information Program Expenditures**

1. Annual Expenditures (Excluding Staffing) 0

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as"  
variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP  
differs from Exhibit 1 and why you consider it to be "at least as effective  
as."

**D. Comments**

Reported as of 6/9/10

**BMP 08: School Education Programs**

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2007**

**A. Implementation**

1. How is your public information program implemented?  
No public information program being implemented
2. Please provide information on your region-wide school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	no	0	0	0
Grades 4th-6th	no	0	0	0
Grades 7th-8th	no	0	0	0
High School	no	0	0	0

4. Did your Agency's materials meet state education framework requirements? no
5. When did your Agency begin implementing this program?

**B. School Education Program Expenditures**

1. Annual Expenditures (Excluding Staffing) 0

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**D. Comments**

Reported as of 6/9/10

**BMP 09: Conservation Programs for CII Accounts**

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2007**

**A. Implementation**

1. Has your agency identified and ranked COMMERCIAL customers according to use? yes
2. Has your agency identified and ranked INDUSTRIAL customers according to use? no
3. Has your agency identified and ranked INSTITUTIONAL customers according to use? yes

---

**Option A: CII Water Use Survey and Customer Incentives Program**


---

4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? If so, please describe activity during reporting period: no

<b>CII Surveys</b>	<b>Commercial Accounts</b>	<b>Industrial Accounts</b>	<b>Institutional Accounts</b>
a. Number of New Surveys Offered	0	0	0
b. Number of New Surveys Completed	0	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0
<b>CII Survey Components</b>	<b>Commercial Accounts</b>	<b>Industrial Accounts</b>	<b>Institutional Accounts</b>
e. Site Visit	no	no	no
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no
<b>Agency CII Customer Incentives</b>	<b>Budget (\$/Year)</b>	<b># Awarded to Customers</b>	<b>Total \$ Amount Awarded</b>
h. Rebates	0	0	0
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

### Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option? no

6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings? no

7. **System Calculated** annual savings (AF/yr):

<b>CII Programs</b>	<b># Device Installations</b>
a. Ultra Low Flush Toilets	0
b. Dual Flush Toilets	0
c. High Efficiency Toilets	0
d. High Efficiency Urinals	0
e. Non-Water Urinals	0
f. Commercial Clothes Washers (coin-op only; not industrial)	0
	0

g. Cooling Tower Controllers	
h. Food Steamers	0
i. Ice Machines	0
j. Pre-Rinse Spray Valves	0
k. Steam Sterilizer Retrofits	0
l. X-ray Film Processors	0

8. **Estimated** annual savings (AF/yr) from agency programs not including the devices listed in Option B. 7., above:

CII Programs	Annual Savings (AF/yr)
a. Site-verified actions taken by agency:	0
b. Non-site-verified actions taken by agency:	0

## B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

## C. "At Least As Effective As"

1. Is your agency implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

## D. Comments

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict water conservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

## BMP 11: Conservation Pricing

Reporting Unit: **City of Pismo Beach**      BMP Form Status: **100% Complete**      Year: **2007**

### A. Implementation

#### Water Service Rate Structure Data by Customer Class

##### 1. Single Family Residential

a. Rate Structure	Increasing Block
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 700,337
c. Total Revenue from Customer Meter/Service (Fixed) Charges	\$ 0

##### 2. Multi-Family Residential

a. Rate Structure	Non-volumetric Flat Rate
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 646,592

c. Total Revenue from Customer Meter/Service (Fixed) Charges \$ 0

### 3. Commercial

a. Rate Structure Non-volumetric Flat Rate

b. Total Revenue from Commodity Charges (Volumetric Rates) \$ 0

c. Total Revenue from Customer Meter/Service (Fixed) Charges \$ 0

### 4. Industrial

a. Rate Structure Non-volumetric Flat Rate

b. Total Revenue from Commodity Charges (Volumetric Rates) \$ 0

c. Total Revenue from Customer Meter/Service (Fixed) Charges \$ 0

### 5. Institutional / Government

a. Rate Structure Non-volumetric Flat Rate

b. Total Revenue from Commodity Charges (Volumetric Rates) \$ 49,438

c. Total Revenue from Customer Meter/Service (Fixed) Charges \$ 0

### 6. Dedicated Irrigation (potable)

a. Rate Structure Non-volumetric Flat Rate

b. Total Revenue from Commodity Charges (Volumetric Rates) \$ 0

c. Total Revenue from Customer Meter/Service (Fixed) Charges \$ 0

### 7. Recycled-Reclaimed

a. Rate Structure Service Not Provided

b. Total Revenue from Commodity Charges (Volumetric Rates) \$ 0

c. Total Revenue from Customer Meter/Service (Fixed) Charges \$ 0

### 8. Raw

a. Rate Structure Service Not Provided

b. Total Revenue from Commodity Charges (Volumetric Rates) \$ 0

c. Total Revenue from Customer Meter/Service (Fixed) Charges \$ 0

### 9. Other

a. Rate Structure Service Not Provided

b. Total Revenue from Commodity Charges (Volumetric Rates) \$ 0

c. Total Revenue from Customer Meter/Service (Fixed) Charges \$ 0

## B. Implementation Options

### Select Either Option 1 or Option 2:

#### 1. Option 1: Use Annual Revenue As Reported

$$V/(V+M) \geq 70\%$$

V = Total annual revenue from volumetric rates

M = Total annual revenue from customer meter/service (fixed)

Selected

charges

## 2. Option 2: Use Canadian Water & Wastewater Association Rate Design Model

$$V/(V+M) \geq V'/(V'+M')$$

V = Total annual revenue from volumetric rates

M = Total annual revenue from customer meter/service (fixed)

charges

V' = The uniform volume rate based on the signatory's long-run

incremental cost of service

M' = The associated meter charge

a. If you selected Option 2, has your agency submitted to the Council a completed Canadian Water & Wastewater Association rate design model?

b. Value for **V'** (uniform volume rate based on agency's long-run incremental cost of service) as determined by the Canadian Water & Wastewater Association rate design model:

c. Value for **M'** (meter charge associated with V' uniform volume rate) as determined by the Canadian Water & Wastewater Association rate design model:

## C. Retail Wastewater (Sewer) Rate Structure Data by Customer Class

1. Does your agency provide sewer service? (If YES, answer questions 2 - 7 below, else continue to section D.) yes

### 2. Single Family Residential

a. Sewer Rate Structure	Non-volumetric Flat Rate
b. Total Annual Revenue	\$ 858,962
c. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0

### 3. Multi-Family Residential

a. Sewer Rate Structure	Allocation-Based
b. Total Annual Revenue	\$ 159,490
c. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0

### 4. Commercial

a. Sewer Rate Structure	Non-volumetric Flat Rate
b. Total Annual Revenue	\$ 1,116,110
c. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0

### 5. Industrial

a. Sewer Rate Structure	Service Not Provided
b. Total Annual Revenue	\$ 0
c. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0

### 6. Institutional / Government

a. Sewer Rate Structure	Non-volumetric Flat Rate
b. Total Annual Revenue	\$ 30,930

c. Total Revenue from Commodity Charges (Volumetric Rates) \$ 0

#### 7. Recycled-reclaimed water

a. Sewer Rate Structure Service Not Provided

b. Total Annual Revenue \$ 0

c. Total Revenue from Commodity Charges (Volumetric Rates) \$ 0

#### D. "At Least As Effective As"

1. Is your agency implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

#### E. Comments

Multi Family, Commercial and Industrial all included in Water Non Residential billing. Also in 2007 irrigation water was classified as Water non residential revenue.

### BMP 12: Conservation Coordinator

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2007**

#### A. Implementation

1. Does your Agency have a conservation coordinator? no

2. Is a coordinator position supplied by another agency with which you cooperate in a regional conservation program ? no

a. Partner agency's name:

3. If your agency supplies the conservation coordinator:

a. What percent is this conservation coordinator's position? 0%

b. Coordinator's Name

c. Coordinator's Title

d. Coordinator's Experience and Number of Years

e. Date Coordinator's position was created (mm/dd/yyyy)

4. Number of conservation staff (FTEs), including Conservation Coordinator. 0

#### B. Conservation Staff Program Expenditures

1. Staffing Expenditures (In-house Only) 0

2. BMP Program Implementation Expenditures 0

#### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict waterconservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

## D. Comments

### BMP 13: Water Waste Prohibition

Reporting Unit:	BMP Form Status:	Year:
<b>City of Pismo Beach</b>	<b>100% Complete</b>	<b>2007</b>

#### A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area? no

a. If YES, describe the ordinance:

2. Is a copy of the most current ordinance(s) on file with CUWCC? no

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

0

0

#### B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

a. Gutter flooding yes

b. Single-pass cooling systems for new connections no

c. Non-recirculating systems in all new conveyor or car wash systems yes

d. Non-recirculating systems in all new commercial laundry systems yes

e. Non-recirculating systems in all new decorative fountains no

f. Other, please name no

2. Describe measures that prohibit water uses listed above:

The Code enforcement officer will notify the customer of the infraction, If customer does not comply they will be fined accordingly.

#### Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

a. Allow the sale of more efficient, demand-initiated regenerating DIR models. yes

b. Develop minimum appliance efficiency standards that:

i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used. no

- ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced. no
- c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply. no
4. Does your agency include water softener checks in home water audit programs? no
5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models? no
- C. "At Least As Effective As"**
1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**D. Comments**

The City is in the process of implementing BMP's

**BMP 14: Residential ULFT Replacement Programs**

Reporting Unit: City of Pismo Beach      BMP Form Status: 100% Complete      Year: 2007

**A. Implementation**

**Number of 1.6 gpf Toilets Replaced by Agency Program During Report Year**

	Single-Family Accounts	Multi-Family Units
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
<b>Replacement Method</b>	<b>SF Accounts</b>	<b>MF Units</b>
2. Rebate	0	0
3. Direct Install	0	0
4. CBO Distribution	0	0
5. Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**Number of 1.2 gpf High-Efficiency Toilets (HETs) Replaced by Agency Program During Report Year**

	Single-Family Accounts	Multi-Family Units
6. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
<b>Replacement Method</b>	<b>SF Accounts</b>	<b>MF Units</b>
7. Rebate	0	0

8. Direct Install	0	0
9. CBO Distribution	0	0
10. Other	0	0
<hr/>		
<b>Total</b>	<b>0</b>	<b>0</b>

**Number of Dual-Flush Toilets Replaced by Agency Program During Report Year**

	<b>Single-Family Accounts</b>	<b>Multi-Family Units</b>
11. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
<b>Replacement Method</b>	<b>SF Accounts</b>	<b>MF Units</b>
12. Rebate	0	0
13. Direct Install	0	0
14. CBO Distribution	0	0
15. Other	0	0
<hr/>		
<b>Total</b>	<b>0</b>	<b>0</b>

16. Describe your agency's ULFT, HET, and/or Dual-Flush Toilet programs for single-family residences.

17. Describe your agency's ULFT, HET, and/or Dual-Flush Toilet programs for multi-family residences.

18. Is a toilet retrofit on resale ordinance in effect for your service area? no

19. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

**B. Residential ULFT Program Expenditures**

1. Estimated cost per ULFT/HET replacement: 0

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict waterconservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

**D. Comments**

**Water Supply & Reuse**

Reporting Unit:

**City of Pismo Beach**

Year:

**2008****Water Supply Source Information****Supply Source Name****Quantity (AF) Supplied****Supply Type**

State Water

802.67

Imported

Lopez Water

896

Local Watershed

Pismo

530.46

Groundwater

**Total AF: 2229.13**

Reported as of 6/9/10

## Accounts & Water Use

Reporting Unit Name:  
**City of Pismo Beach**

Submitted to  
CUWCC  
09/01/2009

Year:  
**2008**

What is the reporting year?	Fiscal	Month Ending	June
<b>A. Service Area Population Information:</b>			
1. Total service area population	8662		
<b>B. Number of Accounts and Water Deliveries (AF)</b>			
Type	Metered	Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts
			Water Deliveries (AF)
1. Single-Family	3764	1097.04	0
2. Multi-Family	313	113.27	0
3. Commercial	328	491.08	0
4. Industrial	0	0	0
5. Institutional	120	104.44	0
6. Dedicated Irrigation	136	226.14	0
7. Recycled Water	0	0	0
8. Other	0	0	0
9. Unaccounted	NA	0	NA
<b>Total</b>	4661	2031.97	0
	<b>Metered</b>	<b>Unmetered</b>	

Reported as of 6/9/10

## BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2008**

### A. Implementation

- Based on your signed MOU date, 12/08/2004, your Agency STRATEGY DUE DATE is: 12/08/2006
- Has your agency developed and implemented a targeting/marketing strategy for SINGLE-FAMILY residential water use surveys? no
  - If YES, when was it implemented?
- Has your agency developed and implemented a targeting/marketing strategy for MULTI-FAMILY residential water use surveys? no
  - If YES, when was it implemented?

### B. Water Survey Data

**Survey Counts:**

**Single Family Multi-Family**

	Accounts	Units
1. Number of surveys offered:	0	0
2. Number of surveys completed:	0	0
<b>Indoor Survey:</b>		
3. Check for leaks, including toilets, faucets and meter checks	no	no
4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary	no	no
5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary	no	no
<b>Outdoor Survey:</b>		
6. Check irrigation system and timers	no	no
7. Review or develop customer irrigation schedule	no	no
8. Measure landscaped area (Recommended but not required for surveys)	no	no
9. Measure total irrigable area (Recommended but not required for surveys)	no	no
10. Which measurement method is typically used (Recommended but not required for surveys)		None
11. Were customers provided with information packets that included evaluation results and water savings recommendations?	no	no
12. Have the number of surveys offered and completed, survey results, and survey costs been tracked?	no	no
a. If yes, in what form are surveys tracked?		None
b. Describe how your agency tracks this information.		

### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with water conservation fixtures in order to obtain a building permit. Strict water conservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

### D. Comments

Reported as of 6/9/10

**BMP 02: Residential Plumbing Retrofit**

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2008**

**A. Implementation**

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? no
  - a. If YES, list local jurisdictions in your service area and code or ordinance in each:
2. Has your agency satisfied the 75% saturation requirement for single-family housing units? no
3. Estimated percent of single-family households with low-flow showerheads: 90%
4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? no
5. Estimated percent of multi-family households with low-flow showerheads: 90%
6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

**B. Low-Flow Device Distribution Information**

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? no
  - a. If YES, when did your agency begin implementing this strategy?
  - b. Describe your targeting/ marketing strategy.

<b>Low-Flow Devices Distributed/ Installed</b>	<b>SF Accounts</b>	<b>MF Units</b>
2. Number of low-flow showerheads distributed:	0	0
3. Number of toilet-displacement devices distributed:	0	0
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed:	0	0
6. Does your agency track the distribution and cost of low-flow devices?		no
a. If YES, in what format are low-flow devices tracked?		
b. If yes, describe your tracking and distribution system :		

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

In the late 80's and early 90's the City required retrofitting existing fixtures as a requirement to obtain a building permit. The City was extensively surveyed and retrofitted at that time. Building codes have also required water saving devices. Hence, it is believed that the City is up to current water saving standards. This information is contained in the 2005 Report.

**D. Comments**

According to the City's Water Master Plan there is sufficient potable water to meet the full build out needs of the City.

Reported as of 6/9/10

**BMP 03: System Water Audits, Leak Detection and Repair**

Reporting Unit:

BMP Form Status:

Year:

**City of Pismo Beach****100% Complete****2008****A. Implementation**

1. Does your agency own or operate a water distribution system? yes
2. Has your agency completed a pre-screening system audit for this reporting year? no
3. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:
  - a. Determine metered sales (AF) 0
  - b. Determine other system verifiable uses (AF) 0
  - c. Determine total supply into the system (AF) 0
  - d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. 0.00
4. Does your agency keep necessary data on file to verify the values entered in question 3? yes
5. Did your agency complete a full-scale audit during this report year? no
6. Does your agency maintain in-house records of audit results or completed AWWA M36 audit worksheets for the completed audit which could be forwarded to CUWCC? no
7. Does your agency operate a system leak detection program? yes
  - a. If yes, describe the leak detection program:

When a leak is suspected, we contract with a specialist to determine the probable location of the leak. Then we excavate and repair.

**B. Survey Data**

1. Total number of miles of distribution system line. 51
2. Number of miles of distribution system line surveyed. 5.1

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

The City has records of water supplied and water sold and compares the difference. This figure is typically less than 8%, which is within acceptable limits.

**D. Comments****Voluntary Questions (Not used to calculate compliance)****E. Volumes****Estimated      Verified**

1. Volume of raw water supplied to the system:
2. Volume treated water supplied into the system:

3. Volume of water exported from the system:
4. Volume of billed authorized metered consumption:
5. Volume of billed authorized unmetered consumption:
6. Volume of unbilled authorized metered consumption:
7. Volume of unbilled authorized unmetered consumption:

## **F. Infrastructure and Hydraulics**

1. System input (source or master meter) volumes metered at the entry to the:
2. How frequently are they tested and calibrated?
3. Length of mains:
4. What % of distribution mains are rigid pipes (metal, ac, concrete)?
5. Number of service connections:
6. What % of service connections are rigid pipes (metal)?
7. Are residential properties fully metered?
8. Are non-residential properties fully metered?
9. Provide an estimate of customer meter under-registration:
10. Average length of customer service line from the main to the point of the meter:
11. Average system pressure:
12. Range of system pressures:

From to

13. What percentage of the system is fed from gravity feed?
14. What percentage of the system is fed by pumping and re-pumping?

## **G. Maintenance Questions**

1. Who is responsible for providing, testing, repairing and replacing customer meters?
2. Does your agency test, repair and replace your meters on a regular timed schedule?
  - a. If yes, does your agency test by meter size or customer category?:
    - Less than or equal to 1"
    - 1.5" to 2"
    - 3" and Larger
  - b. If yes to meter size, please provide the frequency of testing by meter size:
  - c. If yes to customer category, provide the frequency of testing by customer category:
    - SF residential
    - MF residential
    - Commercial
    - Industrial & Institutional
3. Who is responsible for repairs to the customer lateral or customer service line?

4. Who is responsible for service line repairs downstream of the customer meter?
5. Does your agency proactively search for leaks using leak survey techniques or does your utility reactively repair leaks which are called in, or both?
6. What is the utility budget breakdown for:

Leak Detection	\$
Leak Repair	\$
Auditing and Water Loss Evaluation	\$
Meter Testing	\$

## H. Comments

Reported as of 6/9/10

## BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2008**

### A. Implementation

1. Does your agency have any unmetered service connections? No
  - a. If YES, has your agency completed a meter retrofit plan?
  - b. If YES, number of previously unmetered accounts fitted with meters during report year:
2. Are all new service connections being metered and billed by volume of use? Yes
3. Are all new service connections being billed volumetrically with meters? Yes
4. Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? No
5. Please fill out the following matrix:

Account Type	Number of Metered Accounts	Number of Metered Accounts Read	Number of Metered Accounts Billed by Volume	Billing Frequency Per Year	Number of Volume Estimates
a. Single Family	3764	3764	3764	6	0
b. Multi-Family	313	313	313	6	0
c. Commercial	328	328	328	6	0
d. Industrial	0	0	0	0	0
e. Institutional	120	120	120	6	0
f. Landscape Irrigation	132	132	132	6	0

### B. Feasibility Study

1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? no

a. If YES, when was the feasibility study conducted?  
(mm/dd/yy)

b. Describe the feasibility study:

2. Number of CII accounts with mixed-use meters: 17

3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period. 17

### C. "At Least As Effective As"

1. Is your agency implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

### D. Comments

## BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2008**

### A. Water Use Budgets

1. Number of Dedicated Irrigation Meter Accounts: 132

2. Number of Dedicated Irrigation Meter Accounts with Water Budgets: 0

3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF): 0

4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF): 0

5. Does your agency provide water use notices to accounts with budgets each billing cycle? no

### B. Landscape Surveys

1. Has your agency developed a marketing / targeting strategy for landscape surveys? no

a. If YES, when did your agency begin implementing this strategy?

b. Description of marketing / targeting strategy:

2. Number of Surveys Offered. 0

3. Number of Surveys Completed. 0

4. Indicate which of the following Landscape Elements are part of your survey:

a. Irrigation System Check no

b. Distribution Uniformity Analysis no

c. Review / Develop Irrigation Schedules no

d. Measure Landscape Area no

e. Measure Total Irrigable Area no

f. Provide Customer Report / Information no

5. Do you track survey offers and results? no
6. Does your agency provide follow-up surveys for previously completed surveys? no
- a. If YES, describe below:

### C. Other BMP 5 Actions

1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? no
2. Number of CII mixed-use accounts with landscape budgets. 0
3. Do you offer landscape irrigation training? no
4. Does your agency offer financial incentives to improve landscape water use efficiency? no

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
a. Rebates	0	0	0
b. Loans	0	0	0
c. Grants	0	0	0
5. Do you provide landscape water use efficiency information to new customers and customers changing services?			No

a. If YES, describe below:

6. Do you have irrigated landscaping at your facilities? yes
- a. If yes, is it water-efficient? yes
- b. If yes, does it have dedicated irrigation metering? yes
7. Do you provide customer notices at the start of the irrigation season? no
8. Do you provide customer notices at the end of the irrigation season? no

### D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

### E. Comments

Reported as of 6/9/10

## BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:  
City of Pismo Beach

BMP Form Status:  
100% Complete

Year:  
2008

### A. Implementation

1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers?
  - a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.

2. Does your agency offer rebates for high-efficiency washers? no
3. What is the level of the rebate?
4. Number of rebates awarded.

## B. Rebate Program Expenditures

**This Year   Next Year**

1. Budgeted Expenditures
2. Actual Expenditures

## C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

## D. Comments

Reported as of 6/9/10

## BMP 07: Public Information Programs

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2008**

### A. Implementation

1. How is your public information program implemented?  
No public information program being implemented
2. Describe the program and how it's organized:

3. Indicate which and how many of the following activities are included in your public information program:

Public Information Program Activity in Retail Service Area	Yes/No	Number of Events
a. Paid Advertising	no	
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	no	
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	no	
f. Special Events, Media Events	no	
g. Speaker's Bureau	no	
h. Program to coordinate with other government agencies, industry and public interest groups and media	no	

**B. Conservation Information Program Expenditures**

1. Annual Expenditures (Excluding Staffing) 0

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**D. Comments**

Reported as of 6/9/10

**BMP 08: School Education Programs**

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2008**

**A. Implementation**

1. How is your public information program implemented?  
No public information program being implemented
2. Please provide information on your region-wide school programs (by grade level):

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	no	0	0	0
Grades 4th-6th	no	0	0	0
Grades 7th-8th	no	0	0	0
High School	no	0	0	0

4. Did your Agency's materials meet state education framework requirements? no
5. When did your Agency begin implementing this program?

**B. School Education Program Expenditures**

1. Annual Expenditures (Excluding Staffing) 0

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
  - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**D. Comments**

Reported as of 6/9/10

**BMP 09: Conservation Programs for CII Accounts**

Reporting Unit:  
**City of Pismo Beach**

BMP Form Status:  
**100% Complete**

Year:  
**2008**

**A. Implementation**

1. Has your agency identified and ranked COMMERCIAL customers according to use? yes
2. Has your agency identified and ranked INDUSTRIAL customers according to use? no
3. Has your agency identified and ranked INSTITUTIONAL customers according to use? yes

---

**Option A: CII Water Use Survey and Customer Incentives Program**


---

4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? If so, please describe activity during reporting period: no

<b>CII Surveys</b>	<b>Commercial Accounts</b>	<b>Industrial Accounts</b>	<b>Institutional Accounts</b>
a. Number of New Surveys Offered	0	0	0
b. Number of New Surveys Completed	0	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0
<b>CII Survey Components</b>	<b>Commercial Accounts</b>	<b>Industrial Accounts</b>	<b>Institutional Accounts</b>
e. Site Visit	no	no	no
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no
<b>Agency CII Customer Incentives</b>	<b>Budget (\$/Year)</b>	<b># Awarded to Customers</b>	<b>Total \$ Amount Awarded</b>
h. Rebates	0	0	0
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

### Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option? no

6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings? no

7. **System Calculated** annual savings (AF/yr):

<b>CII Programs</b>	<b># Device Installations</b>
a. Ultra Low Flush Toilets	0
b. Dual Flush Toilets	0
c. High Efficiency Toilets	0
d. High Efficiency Urinals	0
e. Non-Water Urinals	0
f. Commercial Clothes Washers (coin-op only; not industrial)	0
	0

g. Cooling Tower Controllers	
h. Food Steamers	0
i. Ice Machines	0
j. Pre-Rinse Spray Valves	0
k. Steam Sterilizer Retrofits	0
l. X-ray Film Processors	0

8. **Estimated** annual savings (AF/yr) from agency programs not including the devices listed in Option B. 7., above:

CII Programs	Annual Savings (AF/yr)
a. Site-verified actions taken by agency:	0
b. Non-site-verified actions taken by agency:	0

## B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	6500	6500
2. Actual Expenditures	0	

## C. "At Least As Effective As"

1. Is your agency implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

## D. Comments

The City has taken the step this year to budget 6,500 to get the Water Conservation Program Started. The City is currently producing a brochure as an insert that includes steps on how to conserve water and instructions on how to read a water meter. This was distributed to all City of Pismo Beach Residents and Commercial water users.

## BMP 11: Conservation Pricing

Reporting Unit: City of Pismo Beach      BMP Form Status: 100% Complete      Year: 2008

### A. Implementation

#### Water Service Rate Structure Data by Customer Class

##### 1. Single Family Residential

a. Rate Structure	Increasing Block
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 823,615
c. Total Revenue from Customer Meter/Service (Fixed) Charges	\$ 0

##### 2. Multi-Family Residential

a. Rate Structure	Non-volumetric Flat Rate
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 632,329
c. Total Revenue from Customer Meter/Service (Fixed) Charges	\$ 0

**3. Commercial**

a. Rate Structure	Non-volumetric Flat Rate
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0
c. Total Revenue from Customer Meter/Service (Fixed) Charges	\$ 0

**4. Industrial**

a. Rate Structure	Service Not Provided
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0
c. Total Revenue from Customer Meter/Service (Fixed) Charges	\$ 0

**5. Institutional / Government**

a. Rate Structure	Non-volumetric Flat Rate
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 26,338
c. Total Revenue from Customer Meter/Service (Fixed) Charges	\$ 0

**6. Dedicated Irrigation (potable)**

a. Rate Structure	Non-volumetric Flat Rate
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 90,631
c. Total Revenue from Customer Meter/Service (Fixed) Charges	\$ 0

**7. Recycled-Reclaimed**

a. Rate Structure	Service Not Provided
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0
c. Total Revenue from Customer Meter/Service (Fixed) Charges	\$ 0

**8. Raw**

a. Rate Structure	Service Not Provided
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0
c. Total Revenue from Customer Meter/Service (Fixed) Charges	\$ 0

**9. Other**

a. Rate Structure	Service Not Provided
b. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0
c. Total Revenue from Customer Meter/Service (Fixed) Charges	\$ 0

**B. Implementation Options****Select Either Option 1 or Option 2:****1. Option 1: Use Annual Revenue As Reported**

$$V/(V+M) \geq 70\%$$

V = Total annual revenue from volumetric rates

M = Total annual revenue from customer meter/service (fixed) charges

Selected

**2. Option 2: Use Canadian Water & Wastewater**

**Association Rate Design Model**

$$V/(V+M) \geq V'/(V'+M')$$

V = Total annual revenue from volumetric rates

M = Total annual revenue from customer meter/service (fixed) charges

V' = The uniform volume rate based on the signatory's long-run incremental cost of service

M' = The associated meter charge

a. If you selected Option 2, has your agency submitted to the Council a completed Canadian Water & Wastewater Association rate design model?

b. Value for **V'** (uniform volume rate based on agency's long-run incremental cost of service) as determined by the Canadian Water & Wastewater Association rate design model:

c. Value for **M'** (meter charge associated with V' uniform volume rate) as determined by the Canadian Water & Wastewater Association rate design model:

**C. Retail Wastewater (Sewer) Rate Structure Data by Customer Class**

1. Does your agency provide sewer service? (If YES, answer questions 2 - 7 below, else continue to section D.) yes

**2. Single Family Residential**

a. Sewer Rate Structure	Non-volumetric Flat Rate
b. Total Annual Revenue	\$ 956,004
c. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0

**3. Multi-Family Residential**

a. Sewer Rate Structure	Allocation-Based
b. Total Annual Revenue	\$ 171,866
c. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0

**4. Commercial**

a. Sewer Rate Structure	Non-volumetric Flat Rate
b. Total Annual Revenue	\$ 1,047,827
c. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0

**5. Industrial**

a. Sewer Rate Structure	Service Not Provided
b. Total Annual Revenue	\$ 0
c. Total Revenue from Commodity Charges (Volumetric Rates)	\$ 0

**6. Institutional / Government**

a. Sewer Rate Structure	Non-volumetric Flat Rate
b. Total Annual Revenue	\$ 45,503
c. Total Revenue from	\$ 0

Commodity Charges  
(Volumetric Rates)

**7. Recycled-reclaimed water**

- a. Sewer Rate Structure      Service Not Provided
- b. Total Annual Revenue      \$ 0
- c. Total Revenue from  
Commodity Charges  
(Volumetric Rates)      \$ 0

**D. "At Least As Effective As"**

1. Is your agency implementing an "at least as effective as" variant of this BMP?      No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

**E. Comments**

Multi-Family, commercial and Industrial all included as Water non Residential.

**BMP 12: Conservation Coordinator**

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2008**

**A. Implementation**

1. Does your Agency have a conservation coordinator?      no
2. Is a coordinator position supplied by another agency with which you cooperate in a regional conservation program ?      no
- a. Partner agency's name:
3. If your agency supplies the conservation coordinator:
- a. What percent is this conservation coordinator's position?      0%
- b. Coordinator's Name
- c. Coordinator's Title
- d. Coordinator's Experience and Number of Years
- e. Date Coordinator's position was created (mm/dd/yyyy)
4. Number of conservation staff (FTEs), including Conservation Coordinator.      0

**B. Conservation Staff Program Expenditures**

1. Staffing Expenditures (In-house Only)      0
2. BMP Program Implementation Expenditures      6500

**C. "At Least As Effective As"**

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?      yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

The City has currently budgeted 6500 to go towards the City meeting

BMP requirements.

## D. Comments

### BMP 13: Water Waste Prohibition

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2008**

#### A. Requirements for Documenting BMP Implementation

1. Is a water waste prohibition ordinance in effect in your service area? no

a. If YES, describe the ordinance:

2. Is a copy of the most current ordinance(s) on file with CUWCC? no

a. List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

#### B. Implementation

1. Indicate which of the water uses listed below are prohibited by your agency or service area.

a. Gutter flooding	yes
b. Single-pass cooling systems for new connections	no
c. Non-recirculating systems in all new conveyor or car wash systems	yes
d. Non-recirculating systems in all new commercial laundry systems	yes
e. Non-recirculating systems in all new decorative fountains	no
f. Other, please name	no

2. Describe measures that prohibit water uses listed above:

The Code enforcement officer will notify the customer of the infraction, If customer does not comply they will be fined accordingly

#### Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

a. Allow the sale of more efficient, demand-initiated regenerating DIR models.	yes
b. Develop minimum appliance efficiency standards that:	
i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used.	no
ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced.	no
c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply.	no

4. Does your agency include water softener checks in home water audit programs? no
5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models? no

### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

### D. Comments

The City is in the process of implementing BMP's

## BMP 14: Residential ULFT Replacement Programs

Reporting Unit:

**City of Pismo Beach**

BMP Form Status:

**100% Complete**

Year:

**2008**

### A. Implementation

**Number of 1.6 gpf Toilets Replaced by Agency Program During Report Year**

	<b>Single-Family Accounts</b>	<b>Multi-Family Units</b>
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
<b>Replacement Method</b>	<b>SF Accounts</b>	<b>MF Units</b>
2. Rebate	0	0
3. Direct Install	0	0
4. CBO Distribution	0	0
5. Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**Number of 1.2 gpf High-Efficiency Toilets (HETs) Replaced by Agency Program During Report Year**

	<b>Single-Family Accounts</b>	<b>Multi-Family Units</b>
6. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
<b>Replacement Method</b>	<b>SF Accounts</b>	<b>MF Units</b>
7. Rebate	0	0
8. Direct Install	0	0
9. CBO Distribution	0	0
10. Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

### Number of Dual-Flush Toilets Replaced by Agency Program During Report Year

	Single-Family Accounts	Multi-Family Units
11. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	no	no
Replacement Method	SF Accounts	MF Units
12. Rebate	0	0
13. Direct Install	0	0
14. CBO Distribution	0	0
15. Other	0	0
<b>Total</b>	<b>0</b>	<b>0</b>
16. Describe your agency's ULFT, HET, and/or Dual-Flush Toilet programs for single-family residences.		
17. Describe your agency's ULFT, HET, and/or Dual-Flush Toilet programs for multi-family residences.		
18. Is a toilet retrofit on resale ordinance in effect for your service area?		no
19. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:		

### B. Residential ULFT Program Expenditures

1. Estimated cost per ULFT/HET replacement: 0

### C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? yes

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

It is estimated that 90% of the City is equipped with water conservation fixtures. In the late 1980's and early 1990's the City Council adopted resolutions and ordinances that required retrofitting with waterconservation fixtures in order to obtain a building permit. Strict waterconservation requirements were put into place. Current building codes require water saving devices. The City is almost completely built-out and this affluent coastal City is constantly upgrading residential units due to the high value of housing in this area.

### D. Comments

**APPENDIX R – WATER AND SEWER RATE STRUCTURE  
(2010-2011)**



760 Mattie Road  
Pismo Beach, CA 93449  
805-773-4655 Fax: 805-773-7065

Water: June 2011  
Sewer: June 2011

Ord #2007-10  
Ord #2007-11

(Operation, Maint, Replacement and Debt Svcs)

### Water Rates:

#### Per HCF:

WSFR	Single Family	1-12	2.30	(12 > 27.60)
		13+	2.99	
WNR	Multi Family, Mobile Homes		2.55	
	Commercial		2.55	
IRR	Irrigation		2.81	
WCH	Const/Hyd		5.10	
WMU	Municipal		2.55	
WMI	Municipal Irrigation		2.81	

### Water Service Chgs by Meter Size

5/8 & 3/4	31.90
1	63.85
1 1/2	106.30
2	170.10
3	319.15
4	532.05
6	1,276.65

### Sewer Rates:

#### Per HCF:

SFR	Single Family Residential	62.23	Fixed
APT	Apartments/Multi	39.62	Fixed
MH	Mobile Homes	35.77	Fixed
COM	Commercial	4.65	
DR	Dual Residential/Restaurant	6.98	
DRC	Dual Residential/Comercial	5.39	
GROC	Grocery	10.32	
HM	Hotel	4.06	
HMR	Hotel w/restaurant	7.61	
SWC	School w/ cafeteria	4.27	
SWOC	School	3.24	
NSC	Shopping Center	4.55	
BRDWALK	Shopping Center w/Rest	6.98	
IRRIG	Irrigation	NO CHG	
SMU	City Meter	4.65	
CTYIRR	City Meter Irrigation	NO CHG	
CTYDF	City Meter Drinking Fount.	NO CHG	
CTYSS	City Meter Sand Shower	NO CHG	
SEPSFR	Septic Tank	NO CHG	
TRVP	Trailer/RV	3.68	
STAT	Service Station	4.25	
RB	Restaurant/Bakery	10.02	
CONST	Construction	NO CHG	
HYD	Hydrant	NO CHG	
VACLOT	Vacant Lot	NO CHG	
STANDBY	STANDBY...NO CHARGES		

### Sewer Service Chg by Meter Size

5/8	16.75
3/4	23.76
1	37.78
1 1/2	72.82
2	114.88
3	213.01
4	353.20
6	843.86

SFR Pays 16.04 Sewer Svc Chg  
Regardless of Meter Size

78.98 Flat SSFR  
110.88 Flat Chgs for Water/  
Sewer SFR 0 Consumption

SFRLI Single Family Residential Low Income Consumption Only  
APTLI Must have proof of low income status from either PG&E or The Gas Co.